



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: AKZO NOBEL COATINGS K.K. INTERNATIONAL PAINT DIV.

7F, Kudan First Place, 4-1-28, Kudan-kita, Chiyoda-ku, TOKYO

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

6 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
00448	Intersleek 757	BXA752/758/759-Blue, BXA755/758/759-Black, BXA757/758/759-Grey, BXA756/758/759-Red	Foul Release Coating	-	-		2005/05/06 2021/06/14	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01246	Intersleek 970	FXA960/982/983-White, FXA962/982/983-Blue, FXA967/982/983-Red	Foul Release Coating	-	-		2007/09/21 2018/12/17	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
00446	Intersmooth 365 SPC	BEA363-Dark Brown, BEA364-Dark Red, BEA365-Mid Brown	TBT Free Self Polishing Copolymer	1317-39-1 13463-41-7	Cuprous oxide Zinc-2-pyridinethiol-1-oxide		2005/05/06 2018/02/19	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01383	Intersmooth 7460HS SPC	BEA754-Brown, BEA757-Red	TBT Free Self Polishing Copolymer	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2009/07/24 2018/12/17	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01384	Intersmooth 7465HS SPC	BEA774-Brown, BEA777-Red	TBT Free Self Polishing Copolymer	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2009/07/24 2018/12/17	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01482	Interspeed 6400	BQA644-Red, BQA648-Brown	Organotin-free conventional	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide		2011/03/24 2021/06/14	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

This list was updated on 2018/06/15

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

Page 1/ AKZO NOBEL COATINGS K.K. INTERNATIONAL PAINT DIV.

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JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: **BASSERU CHEMICAL CO.,LTD.**
6-10-6, Hikoshima-Honmura-cho, Shimonoseki-shi, YAMAGUCHI

*Continuation process must be taken every 3 years for each system.
*Registered Systems Listed in alphabetical Order.

6 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of: Registration Expiry	Manufactured in
00439	GINNOUMI	Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00433	HR AF	Red	Organotin-free conventional type	1317-39-1	Cuprous oxide	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00435	HR AF SC	Red	Organotin-free ablative type	1317-39-1 330-54-1 64359-81-5	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00436	HR AF SP	Redbrown	Organotin-free self polishing type	1317-39-1 13463-41-7	Cuprous oxide Zinc-2-pyridinethiol-1-oxide	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00440	SEASTORY MARINECHAN	Red, Blue	Organotin-free self polishing hydrolysis type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00441	SEASTORY SAM	Red, Blue, Black	Organotin-free self polishing hydrolysis type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2005/03/11 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

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Page 1 / BASSERU CHEMICAL CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.
Tokyo Club Building, 3-2-6, Kasumigaseki, Chiyoda-ku, TOKYO

*Continuation process must be taken every 3 years for each system.
*Registered Systems Listed in alphabetical Order.

85 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
01523	APPARE	Blue, Red, Light Red, Black	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/01/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
00264	BISCON AF	Red Brown	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/05/21 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01675	CMP BIOCLEAR FLEX	Red Brown	Foul Release Coating	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2017/08/25	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/08/24	Others <input type="checkbox"/>
01211	CMP BIOCLEAR HB	Light Grey, Red Brown, Black	Biocide-free silicon type	-	-		2007/05/28 2018/10/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01571	CMP BIOCLEAR MARKING	Black	Biocide-free silicon type	-	-		2013/12/03 2019/10/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01577	CMP BIOCLEAR PLUS	Black	Foul Release Coating	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2014/02/14	Japan <input checked="" type="checkbox"/>
							2020/06/15	Others <input checked="" type="checkbox"/>
01643	CMP BIOCLEAR PLUS	Red Brown S	Foul Release Coatings	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2016/08/26	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/08/26	Others <input checked="" type="checkbox"/>
01213	CMP BIOCLEAR R	Light Grey, Red Brown	Biocide-free silicon type	-	-		2007/05/28 2019/10/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01678	CMP BIOCLEAR R PLUS	Red Brown	Foul Release Coating	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2017/11/02 2020/11/01	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01484	CMP BIOCLEAR RS	Black	Biocide-free silicon type	-	-		2011/02/04 2019/10/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01646	CMP BIOCLEAR UNDERCOAT PLUS	Plum S	Foul Release Coatings	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2016/08/26	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/08/26	Others <input checked="" type="checkbox"/>
00205	DSP K 5011 Anti-Fouling Paint Chlorinated Rubber Resin Base For Ship's Boot Topping	Black	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/05/21 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00204	DSP K 5011 Anti-Fouling Paint Chlorinated Rubber Resin Base For Ship's Bottom	Brown	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/03/18 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

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Page 1/ CHUGOKU MARINE PAINTS, LTD.



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Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.

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							Expiry	in
00258	Long Life Anti-Fouling For Sub Marine	Black	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2018/12/17	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01365	MARINE STAR 30G	Green I, Blue I, Red Brown I, Silver White I, Red I	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2019/12/07	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01597	MARINE STAR A	White I, Blue I, Red Brown I, Green I, Red I, Black I	Organotin-free self polishing type	1111-67-7	Cuprous Thiocyanate		2015/02/20	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2021/02/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01519	NEW KAIO	Red, Light Red, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/01/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
01522	NEW KAIO 200	Red, Light Red, Red Brown, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/01/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01671	NEW KAIO 300	Red, Blue, Black	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2017/06/16	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00277	NEW KAMOME	Blue, Red	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
							2019/12/07	Others <input type="checkbox"/>
01592	NEW MARINE GOLD	White III, Blue III, Red Brown III, Green III, Red III, Black III	Organotin-free self polishing type	1111-67-7	Cuprous Thiocyanate		2014/10/29	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2020/11/01	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00287	NEW MARINE GOLD DX	White	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane		2004/06/21	Japan <input checked="" type="checkbox"/>
							2018/10/15	Others <input type="checkbox"/>
01368	NEW MARINE GOLD DX	Blue II, Red Brown II, Green II, Red II, Black II	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2019/12/07	Others <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane			
01564	NEW MARINE GOLD DX ALPHA	Red, Blue, Black	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/08/22	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/12/07	Others <input type="checkbox"/>

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Page 2/ CHUGOKU MARINE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

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00288	NEW MARINE GOLD DX CLEAR	Clear	Organotin-free self polishing type	-	-	2004/05/21 2018/10/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
01696	NEW PELLER CLEAN PLUS FINISH	Yellow Brown	Foul Release Coating	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2018/02/16 2021/02/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
01620	SCREW AF COASTAL	Yellow Brown	Foul Release Coating	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2015/08/21 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
01475	SEA GRAND PRIX 500	Light Red, Red	Organotin-free self polishing type	1317-39-1 13463-41-7	Cuprous oxide Zinc-2-pyridinethiol-1-oxide	2010/08/06 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
00206	SEA GRANDPRIX 1000	Purple, Dark Red, Red, Light Red, Blue	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2004/06/21 2020/06/15	Japan <input checked="" type="checkbox"/> Others <input checked="" type="checkbox"/>	
01463	SEA GRANDPRIX 1000 L	Light Brown, Brown, Blue, Brown K, Light Brown K, Brown H, Light Brown H	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2010/06/04 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input checked="" type="checkbox"/>	
01255	SEA GRANDPRIX 200 R	Red, Light Red, Ogi Colour	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2008/01/30 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
00274	SEA GRANDPRIX 2000	Light Red, Red, Purple, Blue, Light Red K, Red K, Blue K, Black K, Red H, Light Red H, Blue H	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2004/05/21 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input checked="" type="checkbox"/>	
01616	SEA GRANDPRIX 2000 A	Light Red, Red, Purple, Blue, Black (1st coat), Black (2nd coat), Light Red N, Red N, Red K, Light Red K, Blue K, Red H, Light Red H, Blue H	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2015/06/19 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input checked="" type="checkbox"/>	
01254	SEA GRANDPRIX 2000 S	Light Red, Red	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2008/01/30 2019/08/26	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	

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Page 3/ CHUGOKU MARINE PAINTS, LTD.

**JPMA List of Registered Organotin-free Anti-fouling Systems**

Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01658	SEA GRANDPRIX 220 HS	Brown R, Light Brown R	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2017/02/24	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2020/02/24	Others <input checked="" type="checkbox"/>
01432	SEA GRANDPRIX 220 HS	Brown, Light Brown, Brown S, Light Brown S	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/11/20	Japan <input checked="" type="checkbox"/>
							2020/06/15	Others <input checked="" type="checkbox"/>
01319	SEA GRANDPRIX 330 HS	Brown, Light brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2008/11/27	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2021/06/14	Others <input checked="" type="checkbox"/>
00209	SEA GRANDPRIX 500	Red, Light Red, Purple	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/10/15	Others <input checked="" type="checkbox"/>
00267	SEA GRANDPRIX 500	Green	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/10/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01320	SEA GRANDPRIX 500 HS	Red, Light Red, Purple, Red N, Light Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2008/11/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/12/17	Others <input checked="" type="checkbox"/>
01321	SEA GRANDPRIX 500 M HS	Red, Light Red, Red K, Light Red K, Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2008/11/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
01329	SEA GRANDPRIX 660 HS	Brown, Light Brown, Brown S, Light Brown S, Brown R, Light Brown R	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/01/20	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2021/06/14	Others <input checked="" type="checkbox"/>
01702	SEA GRANDPRIX 770 HS	Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2018/06/15	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2021/06/14	Others <input checked="" type="checkbox"/>
01625	SEA GRANDPRIX 880 HS	Light Brown, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2015/12/18	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2018/12/17	Others <input checked="" type="checkbox"/>
01446	SEA GRANDPRIX 900 HS	Red, Light Red, Purple, Red N, Light Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/01/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/02/17	Others <input checked="" type="checkbox"/>
				731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino) sulfonyl)-1-fluoro-N-(4-methylphenyl)			
01699	SEA GRANDPRIX 900 L	Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2018/06/15	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2021/06/14	Others <input checked="" type="checkbox"/>

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Page 4/ CHUGOKU MARINE PAINTS, LTD.



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01698	SEA GRANDPRIX 950 L	Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2018/06/15	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input checked="" type="checkbox"/>
01154	SEA GRANDPRIX CF 10 L M EU	Red K, Light Red K	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2007/01/25	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2021/02/15	Others <input checked="" type="checkbox"/>
01155	SEA GRANDPRIX CF SUPER	Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2007/01/25	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/10/15	Others <input checked="" type="checkbox"/>
00210	SEA GRANDPRIX CF-10	Red, Light Red, Purple	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2019/02/17	Others <input checked="" type="checkbox"/>
01480	SEA GRANDPRIX CF-10	K-LINE Grey	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane		2010/12/17	Japan <input checked="" type="checkbox"/>
							2019/10/14	Others <input checked="" type="checkbox"/>
01150	SEA GRANDPRIX CF-10 L	Purple, Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2007/01/25	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/10/15	Others <input checked="" type="checkbox"/>
01239	SEA GRANDPRIX CF-10 L A	Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2007/09/21	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2019/04/22	Others <input checked="" type="checkbox"/>
00266	SEA GRANDPRIX FBX KAI	White	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane		2004/05/21	Japan <input checked="" type="checkbox"/>
							2018/10/15	Others <input type="checkbox"/>
01590	SEA GRANDPRIX FBX KAI	Blue I 737	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2014/06/13	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2020/04/13	Others <input type="checkbox"/>
				731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino) sulfonyl)-1-fluoro-N-(4-methylphenyl)			
				971-66-4	Pyridine-triphenylborane			
00291	SEA GRANDPRIX FRP	Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/10/15	Others <input type="checkbox"/>
01550	SEA GRANDPRIX MARK II	Brown, Light Brown, Brown K, Light Brown K	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/02/15	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
01552	SEA PREMIER 1000	Red, Light Red, Blue	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/06/18	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/04/22	Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 5/ CHUGOKU MARINE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01417	SEA PREMIER 200	Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/07/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine			
01456	SEA PREMIER 450	Red, Light Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2010/03/19	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/12/17	Others <input type="checkbox"/>
01449	SEA PREMIER 800	Red, Light Red, Purple, Red N, Light Red N, Blue, Red H, Light Red H, Blue H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/03/19	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01617	SEA PREMIER 800 Z	Light Red, Red, Purple, Blue, Light Red N, Red N, Red H, Light Red H, Blue H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2015/06/19	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01462	SEA PREMIER 850	Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/06/04	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/02/17	Others <input type="checkbox"/>
01674	SEA PREMIER CF Z	Light Red, Red	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2017/08/25	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2020/08/24	Others <input type="checkbox"/>
01464	SEAFLO NEO	Red, Light Red, Red N, Light Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/06/04	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2019/10/14	Others <input checked="" type="checkbox"/>
01628	SEAFLO NEO	Red N2, Light Red N2	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/02/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/02/17	Others <input checked="" type="checkbox"/>
01591	SEAFLO NEO 500 Z	Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/08/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input checked="" type="checkbox"/>
01626	SEAFLO NEO CF Z	Red, Light Red	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2015/12/18	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2018/12/17	Others <input checked="" type="checkbox"/>
01488	SEAFLO NEO FLAT	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/03/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input checked="" type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 6/ CHUGOKU MARINE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01506	SEAFLO NEO SL	Brown, Light Brown, Brown K, Light Brown K, Blue, Grey, Brown H, Light Brown H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/10/14	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input checked="" type="checkbox"/>
01579	SEAFLO NEO SL Z	Brown, Light Brown, Brown K, Light Brown K, Brown H, Light Brown H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/02/14	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input checked="" type="checkbox"/>
01561	SEAFLO NEO Z	Red, Light Red, Red N, Light Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/08/22	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2019/10/14	Others <input checked="" type="checkbox"/>
01629	SEAFLO NEO Z	Red N2, Light Red N2	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/02/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/02/17	Others <input checked="" type="checkbox"/>
01551	SEAFLO NEO-S	Red, Light Red, Blue, Red N, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/02/15	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01580	SEAFLO NEO-S Z	Red, Light Red, Red N, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/02/14	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01360	SEAJET 033	Shark White I, Blue I, Red I, Black I	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2021/02/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01659	SEAJET 034	VIVID WHITE I	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane		2017/02/24	Japan <input checked="" type="checkbox"/>
							2020/02/24	Others <input type="checkbox"/>
01660	SEAJET 034	Blue, Red, VIVID BLACK I	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2017/02/24	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2020/02/24	Others <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane			
01565	SEAJET 037	White, Black	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/08/22	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/06/17	Others <input type="checkbox"/>

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Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 7/ CHUGOKU MARINE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: CHUGOKU MARINE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01585	SEAJET 039	Ash Black, Ash Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/04/11	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01586	SEAJET 039	Ash Grey	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/04/11	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01487	SEATENDER 20	Light Brown, Brown, Black, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/03/24	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2020/04/13	Others <input type="checkbox"/>
01486	SEATENDER 7	Red Brown	Organotin-free conventional type	1317-39-1	Cuprous oxide		2011/03/24	Japan <input checked="" type="checkbox"/>
01578	TFA-30	Silver white, Black, Red, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/02/14	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2019/12/07	Others <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00263	VINYL AF	Red Brown	Organotin free conventional type	1317-39-1	Cuprous oxide		2004/05/21	Japan <input checked="" type="checkbox"/>
							2018/12/17	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 8/ CHUGOKU MARINE PAINTS, LTD.

**JPMA List of Registered Organotin-free Anti-fouling Systems**Name of Manufacturer: **HEMPEL A/S**

Lundtoftevej 150, DK-2800 KGS.Lyngby, Denmark

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

28 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of: Registration Expiry	Manufactured in
01581	HEMPAGUARD X5 89700	Red	Organotin-free hybrid type	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2014/04/11 2020/02/24	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01582	HEMPAGUARD X7 89900	Red, Black	Organotin-free hybrid type	14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2014/04/11 2020/02/24	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01683	HEMPAGUARD X7 ONE 89930	Black, Red	Organotin-free hybrid type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2017/12/04 2020/12/03	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01627	HEMPASIL X3+ 87500	Grey (15150), Black (19990), Blue (30170), Green (47560), Red (59151)	Biocide free, fouling release type	-	-	2016/04/22 2019/04/22	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01611	HEMPEL'S ANTIFOULING OLYMPIC FB+ 7295B	51110 (red)	Organotin-free self polishing type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide	2015/06/19 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01594	HEMPEL'S ANTIFOULING BASIC 71950	51110 (red), 60600 (brown)	Organotin-free self polishing type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide	2015/02/20 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01689	Hempel's Antifouling Dynamic 9000 79902	Red, Brown	Organotin-free self-polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2018/02/16 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01690	Hempel's Antifouling Dynamic 9000 79952	Red, Brown	Organotin-free self-polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2018/02/16 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01686	Hempel's Antifouling Globic 6000 75952	Black, Red, Brown	Organotin-free self-polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2018/02/16 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01547	HEMPEL'S ANTIFOULING GLOBIC 6000, 75950	Brown 60600, Red 51110	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2013/02/15 2019/02/17	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01595	HEMPEL'S ANTIFOULING GLOBIC 8000 78550	51110 (red), 60600 (brown)	Organotin-free, hydrolysing SPC	12122-67-7 1317-39-1 14915-37-8	Zinc ethylenebis (dithiocarbamate) Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2015/02/20 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01695	Hempel's Antifouling Globic 8000 78552	Red, Brown	Organotin-free hydrolysing SPC type	12122-67-7 1317-39-1 14915-37-8	Zinc ethylenebis (dithiocarbamate) Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	2018/02/16 2021/02/15	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>

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Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

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This list was updated on 2018/06/15

Page 1/ HEMPEL A/S



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: HEMPEL A/S

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01687	Hempel's Antifouling Globic 9000 78902	Black, Blue, Red, Brown	Organotin-free self-polishing type	1317-39-1	Cuprous oxide	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input checked="" type="checkbox"/>	
01688	Hempel's Antifouling Globic 9000 78952	Black, Blue, Red, Brown	Organotin-free self-polishing type	1317-39-1	Cuprous oxide	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input checked="" type="checkbox"/>	
01548	HEMPEL'S ANTIFOULING GLOBIC 9000, 78900	Black 19990, Blue 30170, Brown 60600, Red 51110	Organotin-free self-polishing type	1317-39-1	Cuprous oxide	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input checked="" type="checkbox"/>	
01549	HEMPEL'S ANTIFOULING GLOBIC 9000, 78950	Black 19990, Blue 30170, Brown 60600, Red 51110	Organotin-free self-polishing type	1317-39-1	Cuprous oxide	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input checked="" type="checkbox"/>	
01672	HEMPEL'S ANTIFOULING GLOBIC 9500 M 78954	51110 (red), 60600 (brown)	Organotin-free, hydrolyzing NAT	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2017/06/16 2020/06/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01682	Hempel's Antifouling Globic 9500N 7895N	Red, Brown	Organotin-free, hydrolysing SPC	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01691	Hempel's Antifouling Oceanic 1000 71952	Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
01692	Hempel's Antifouling Oceanic 2000 72902	Black, Blue, Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
01693	Hempel's Antifouling Oceanic 2000 72952	Black, Blue, Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input checked="" type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input type="checkbox"/>	
01694	Hempel's Antifouling Oceanic 2000 FB 7295F	Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
01684	Hempel's Antifouling Oceanic 5000 74902	Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
01685	Hempel's Antifouling Oceanic 5000 74952	Red, Brown	Organotin-free self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2018/02/16 2021/02/15	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	

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Page 2/ HEMPEL A/S



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: HEMPEL A/S

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01545	HEMPEL'S ANTIFOULING OCEANIC+, 73900	Black 19990, Blue 30170, Brown 60600, Green 42650, Red 51110	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine			
01546	HEMPEL'S ANTIFOULING OCEANIC+, 73950	Black 19990, Blue 30170, Brown 60600, Green 42650, Red 51110	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine			
01543	HEMPEL'S ANTIFOULING OLYMPIC+, 72900	Black 19990, Blue 30170, Brown 60600, Red 51110	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	
01544	HEMPEL'S ANTIFOULING OLYMPIC+, 72950	Black 19990, Blue 30170, Brown 60600, Red 51110	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)	2013/02/15 2019/02/17	Japan <input type="checkbox"/>	
				1317-39-1	Cuprous oxide		Others <input checked="" type="checkbox"/>	

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 3/ HEMPEL A/S



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: ISHIKAWA PAINT CO.,LTD.
4-18-31, Kashima, Yodogawa-ku, Osaka-shi, OSAKA

*Continuation process must be taken every 3 years for each system.
*Registered Systems Listed in alphabetical Order.

17 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
00337	CLEANCOAT	Reddish Brown, Red, Blue	Organotin-free self-polishing hydration type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile			Others <input type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
00338	CLEANCOAT	White	Organotin-free self-polishing hydration type	1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			Others <input type="checkbox"/>
00340	CLEANCOAT A/F HP	Red, Blue, Brown	Organotin-free self-polishing hydration type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			Others <input type="checkbox"/>
00339	CLEANCOAT SUPER A/F	Light Brown	Organotin-free self-polishing hydration type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00342	NEWSEARON	Red, Blue, Green, Black	Organotin-free self-polishing hydrolysis type	13108-52-6	2,3,5,6-Tetrachloro-4-(methylsulphonyl)pyridine		2005/02/17 2019/02/17	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide			Others <input type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			
00350	NEWSEARON	White	Organotin-free self-polishing hydrolysis type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2004/12/22 2019/02/17	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine			Others <input type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
00344	NEWSEARON 1000 A/F	Red, Brown	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00345	NEWSEARON 2000 A/F	Red, Brown	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00346	NEWSEARON 2000A A/F	Brown, Dark Brown	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00347	NEWSEARON 3000 A/F	Red, Brown	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00343	NEWSEARON F	Red	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>
00349	NEWSEARON SEACHEST A/F	Red, Brown	Organotin-free self-polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 1 / ISHIKAWA PAINT CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: ISHIKAWA PAINT CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00355	POISON	Reddish brown	Organotin-free self-polishing type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00356	RABACOAT A/F C	Reddish brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00353	VINIHARD A/F	Reddish brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00354	VINIHARD A/F #1000	Reddish brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00352	VINYCRON A/F	Reddish brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/10/26 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 2/ ISHIKAWA PAINT CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANAE PAINT CO.,LTD.

1-6-13, Hanaten-Higashi, Tsurumi-ku, Osaka-shi, OSAKA

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

20 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
00062	CLEAN TOP DELUXE	Clear	Biocide-free silicon type	-	-		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01207	KANAE PORT A/F #7000AL KAI	Red, Red Brown, Brown, Light Brown, Blue, 808Blue	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2007/05/28 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01574	KANAE PORT A/F #5000msKAI	Red N, Brown N	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2014/02/14 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01573	KANAE PORT A/F #7000B KAI	Red N, Brown N, 808Blue N	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2014/02/14 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00005	KANAE PORT A/F CLEAN #1000	Brown	Organotin-free ablative type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00010	KANAE PORT A/F CLEAN #2000 HD	Redbrown, Brown	Organotin-free ablative type	1317-39-1 28159-98-0 330-54-1	Cuprous oxide 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00013	KANAE PORT A/F CLEAN #4000	Redbrown, Brown	Organotin-free ablative type	1317-39-1 28159-98-0 330-54-1	Cuprous oxide 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00016	KANAE PORT A/F CLEAN #5000 M	White	Organotin-free self polishing type	28159-98-0 971-66-4	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine Pyridine-triphenylborane		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00014	KANAE PORT A/F CLEAN #5000 N-10	Red,Brown	Organotin-free self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01603	KNAE PORT G	Red N, Blue N, Black N	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2015/04/17 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 1/ KANAE PAINT CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANAE PAINT CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00003	KR-A/F N	Brown, D Brown	Organotin-free conventional type	1317-39-1	Cuprous oxide		2004/03/18 2018/10/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00002	KR-A/F NB BROWN	Brown	Organotin-free ablative type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00004	KT VINYL A/F D	Brown	Organotin-free conventional type	1317-39-1	Cuprous oxide		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01572	NEW TAIRYO	Red N, Brown N, Blue N	Organotin-free self polishing type	1317-39-1 14915-37-8 64359-81-5	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2014/02/14 2020/02/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00056	SEA HAWK	Green	Organotin-free self polishing type	13463-41-7 137-30-4 28159-98-0 971-66-4	Zinc-2-pyridinethiol-1-oxide Zinc dimethyl dithiocarbamate 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine Pyridine-triphenylborane		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01028	SEA HAWK #1000 H	Red, Red Brown, Brown, Light Brown, Blue, 808Blue	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2005/11/14 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00048	SUPER TAIRYO	Red, Brown, Blue, Green, Black	Organotin-free self polishing type	13463-41-7 137-30-4 28159-98-0 971-66-4	Zinc-2-pyridinethiol-1-oxide Zinc dimethyl dithiocarbamate 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine Pyridine-triphenylborane		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00050	SUPER TAIRYO B/T	White	Organotin-free self polishing type	28159-98-0 971-66-4	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine Pyridine-triphenylborane		2004/03/18 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01033	SUPER TAIRYO DX	Red, Brown, Blue, Green, Black	Organotin-free self polishing type	13463-41-7 64359-81-5 971-66-4	Zinc-2-pyridinethiol-1-oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one Pyridine-triphenylborane		2005/11/14 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01195	SUPER TAIRYO No. 1	Red, Brown, Blue, Green, Black	Organotin-free self polishing type	13463-41-7 64359-81-5 971-66-4	Zinc-2-pyridinethiol-1-oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one Pyridine-triphenylborane		2007/05/28 2019/02/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

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This list was updated on 2018/06/15

Page 2/ KANAE PAINT CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANSAI PAINT MARINE CO.,LTD.
3-12-1, Minamirokugo, Ota-ku, TOKYO

*Continuation process must be taken every 3 years for each system.
*Registered Systems Listed in alphabetical Order.

54 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
00121	AF FOR SEA CHEST	Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01424	AF MX-2080	Light Brown, Brown	Organotin-free self polishing hydrolysis type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2009/07/24	Japan <input checked="" type="checkbox"/>
							2021/06/14	Others <input type="checkbox"/>
01314	CLEAR EXION	Clear	Organotin-free self polishing hydrolysis type	64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00123	C-RUBAN A/F	Brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00128	C-RUBAN A/F for SUBMARINE	Brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00126	C-RUBAN A/F HP	Brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00129	C-RUBAN B/T for SUBMARINE	Black	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00157	NEWPLADOL for SUBMARINE	Black	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01279	NKM SEAFORCE30	Dark Red, Light Red	Organotin-free self polishing hydration type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2008/05/28	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide		2020/02/24	Others <input type="checkbox"/>
01107	SEAFORCE 30	Light Red, Dark Red	Organotin-free self polishing hydration type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2006/04/25	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide		2021/06/14	Others <input checked="" type="checkbox"/>
01108	SEAFORCE 60	Light Red, Dark Red	Organotin-free self polishing hydration type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2006/04/25	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide		2021/06/14	Others <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-			
01109	SEAFORCE 90	Light Red, Dark Red, Blue, Black, Green	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2006/04/25	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input checked="" type="checkbox"/>
00117	SEAQUEEN	Light Red, Dark Red	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input checked="" type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 1/ KANSAI PAINT MARINE CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANSAI PAINT MARINE CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01306	SHIN LLL No.100	Brown, Red, Dark Brown, Light Brown, Chocolat, Rouille, Blue, Brown K	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/02/24	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01305	SHIN LLL No.100 for HIGH SPEED VESSEL	Brown, Red, Dark Brown, Light Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01307	SHIN LLL No.300	Light Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01423	SHIN LLL P/B	Brown, Dark Brown, Light Brown, Red	Organotin-free self polishing hydrolysis Type	1317-39-1	Cuprous oxide	2009/07/24 2020/02/24	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01311	TAKATA A/F for SUBMARINE	Black	Organotin-free ablative type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
							Others <input type="checkbox"/>	
01297	TAKATA QUANTUM	MOL Green, Luminous Blue, Blue	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01299	TAKATA QUANTUM 16 FOR COASTAL VESSEL	Brown, Red, Dark Brown, Light Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01298	TAKATA QUANTUM 20 FOR COASTAL VESSEL	Brown, Red, Dark Brown, Light Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/12/15 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01425	TAKATA QUANTUM 2L	Light Brown, Dark Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2009/07/24 2021/06/14	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
00401	TAKATA QUANTUM CLASSIC	Light Brown, Dark Brown, Dark Red, Light Red, Blue	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2004/12/22 2020/02/24	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
00403	TAKATA QUANTUM FB	Light Brown, Dark Brown, Light Red, Dark Red	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2004/12/22 2020/02/24	Japan <input checked="" type="checkbox"/>	
							Others <input type="checkbox"/>	
01427	TAKATA QUANTUM FB(R)	Light Brown, Dark Brown, Light Red, Dark Red	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2009/07/24 2020/02/24	Japan <input checked="" type="checkbox"/>	
							Others <input type="checkbox"/>	
01275	TAKATA QUANTUM FB(S)	Light Brown, Dark Brown, Light Red, Dark Red	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide	2008/05/28 2020/02/24	Japan <input checked="" type="checkbox"/>	
							Others <input type="checkbox"/>	

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*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 2/ KANSAI PAINT MARINE CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANSAI PAINT MARINE CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00146	TAKATA QUANTUM for COASTAL VESSEL	Brown, Red, Dark Brown, Light Brown, Blue	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01662	TAKATA QUANTUM for COASTAL VESSEL	Brown, Dark Brown, Red, Black	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2017/02/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01300	TAKATA QUANTUM for COASTAL VESSEL SEAKING II	Brown, Red, Dark Brown, Light Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2008/12/15	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
00145	TAKATA QUANTUM for FISHING VESSEL	Brown, Red, Dark Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
00385	TAKATA QUANTUM LLL	Light Brown, Dark Brown, Brown, Dark	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/12/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input checked="" type="checkbox"/>
01315	TAKATA QUANTUM LLL FB	Light Brown, Dark Brown, Light Red, Dark Red, Brown, Light	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2008/12/15	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/04/13	Others <input type="checkbox"/>
00143	TAKATA QUANTUM ND	Light Brown, Dark Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
00402	TAKATA QUANTUM PLUS	Light Brown, Dark Brown, Blue, Red, Light Red, Dark Red	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/12/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01426	TAKATA QUANTUM PLUS(R)	Light Brown, Dark Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2009/07/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input type="checkbox"/>
01276	TAKATA QUANTUM SUPREME	Light Brown, Dark brown, Light Red, Dark Red	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2008/05/28	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
00400	TAKATA QUANTUM ULTRA	Light Brown, Dark Brown	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2004/12/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01669	TAKATA QUANTUM X-mile 000	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2017/06/16	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01670	TAKATA QUANTUM X-mile 000 FB	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2017/06/16	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>

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*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 3/ KANSAI PAINT MARINE CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANSAI PAINT MARINE CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01491	TAKATA QUANTUM X-mile 001	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01492	TAKATA QUANTUM X-mile 002	Brick, Maroon, Blue	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01493	TAKATA QUANTUM X-mile 003	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01494	TAKATA QUANTUM X-mile 005	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01495	TAKATA QUANTUM X-mile 006	Brick, Maroon, Blue	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/04/13	Others <input type="checkbox"/>
01496	TAKATA QUANTUM X-mile 007	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
01666	TAKATA QUANTUM X-mile FB	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2017/06/16	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01665	TAKATA QUANTUM X-mile ND	Brick, Maroon	Organotin-free self polishing hydrolysis type	1317-39-1	Cuprous oxide		2017/06/16	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01630	X-mile Premium 101	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01631	X-mile Premium 102	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01632	X-mile Premium 103	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01633	X-mile Premium 105	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01634	X-mile Premium 106	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01635	X-mile Premium 107	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>

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Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

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This list was updated on 2018/06/15

Page 4/ KANSAI PAINT MARINE CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KANSAI PAINT MARINE CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Sytems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01636	X-mile Premium 108	Brick, Maroon	Organotin-free self polishing hydration type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 5/ KANSAI PAINT MARINE CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KOBE PAINTS, LTD.

Aza Hyakuchobu, Rokubuichi, Imai-cho Kako-gun, HYOGO

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

51 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
01333	AQUA ACE 3000	Red, Blue, White, Black	Organotin-free self polishing type	13463-41-7 64359-81-5 971-66-4	Zinc-2-pyridinethiol-1-oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one Pyridine-triphenylborane		2009/04/03 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01331	CLEAN A/F 1000	Brown, Red	Organotin-free conventional type	1317-39-1	Cuprous oxide		2009/04/03 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01542	CLEAN A/F 700	Red Brown	Organotin-free conventional type	1317-39-1	Cuprous oxide		2012/12/10 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01503	KP ACE A/F ST 20	Light Brown, Brown, Black	Organotin-free self polishing type	1317-39-1 64359-81-5	Cuprous oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2011/10/14 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01334	NEW CHAMPION	Red, Blue, White, Black	Organotin-free self polishing type	13463-41-7 64359-81-5 971-66-4	Zinc-2-pyridinethiol-1-oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one Pyridine-triphenylborane		2009/04/03 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01332	NEW PLACOAT	Red, Blue, Brown	Organotin-free conventional type	1317-39-1	Cuprous oxide		2009/04/03 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01335	OCEAN DYNA K-LINE GREY APPROXIMATE COLOR	Grey	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane		2009/04/03 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01569	OCEAN PREMIER 1000	Light Red, Red, Blue	Organotin-free self polishing type	122454-29-9 13463-41-7	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide		2013/08/22 2019/08/26	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01468	OCEAN PREMIER 200	Light Red, Red	Organotin-free self polishing type	1317-39-1 14915-37-8 28159-98-0	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)- 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01469	OCEAN PREMIER 400	Light Red, Red	Organotin-free self polishing type	731-27-1 971-66-4	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino)sulfonyl)-1-fluoro-N-(4-methylphenyl) Pyridine-triphenylborane		2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01613	OCEAN PREMIER 400 KAI	Light Red, Red	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2015/06/19 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 1 / KOBE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KOBE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01470	OCEAN PREMIER 400H	Light Red, Red	Organotin-free self polishing type	731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino) sulfonyl)-1-fluoro-N-(4-methylphenyl)	2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/>	
				971-66-4	Pyridine-triphenylborane		Others <input type="checkbox"/>	
01471	OCEAN PREMIER 400H	Blue	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide	2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/>	
				971-66-4	Pyridine-triphenylborane		Others <input type="checkbox"/>	
01615	OCEAN PREMIER 400H KAI	Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide	2015/06/19 2021/06/14	Japan <input checked="" type="checkbox"/>	
				971-66-4	Pyridine-triphenylborane		Others <input type="checkbox"/>	
01472	OCEAN PREMIER 450	Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide	2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/>	
				971-66-4	Pyridine-triphenylborane		Others <input type="checkbox"/>	
01473	OCEAN PREMIER 800	Purple, Light Red, Red, Light Red N, Red N, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2010/08/06 2018/12/17	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01637	OCEAN PREMIER 800 Z	Purple, Light Red, Red, Light Red N, Red N, Blue, Light Red H, Red H, Blue H	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2016/04/22 2020/06/15	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01474	OCEAN PREMIER 850	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2010/08/06 2019/08/26	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01540	OCEAN-DYNA	White	Organotin-free self polishing type	971-66-4	Pyridine-triphenylborane	2012/12/10 2018/12/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>	
01467	OCEAN-DYNA NEO	Light Red, Red, Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2010/08/06 2020/04/13	Japan <input checked="" type="checkbox"/>	
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		Others <input type="checkbox"/>	
01649	OCEAN-DYNA NEO	Light Red N2, Red N2	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2016/12/07 2019/12/07	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01621	OCEAN-DYNA NEO 500 Z	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2015/08/21 2018/08/20	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	
01647	OCEAN-DYNA NEO CF Z	Light Red, Red	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile	2016/08/26 2019/08/26	Japan <input checked="" type="checkbox"/>	
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		Others <input type="checkbox"/>	
01502	OCEAN-DYNA NEO FLAT	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2011/10/14 2020/11/01	Japan <input checked="" type="checkbox"/>	
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others <input type="checkbox"/>	

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This list was updated on 2018/06/15

Page 2/ KOBE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KOBE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01601	OCEAN-DYNA NEO FLAT Z	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2015/02/20	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/02/15	Others <input type="checkbox"/>
01539	OCEAN-DYNA NEO SL	Light Brown, Brown, Light Brown H, Brown H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/12/10	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01599	OCEAN-DYNA NEO SL Z	Light Brown, Brown, Light Brown H, Brown H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2015/02/20	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01583	OCEAN-DYNA NEO Z	Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2014/04/11	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2020/04/13	Others <input type="checkbox"/>
01650	OCEAN-DYNA NEO Z	Light Red N2, Red N2	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/12/07	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/12/07	Others <input type="checkbox"/>
01566	OCEAN-DYNA NEO-S	Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/08/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/08/26	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01602	OCEAN-DYNA NEO-S Z	Light Red, Red, Red N, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2015/02/20	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/02/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01461	OYASHIO	Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/06/04	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01459	SOKOPEN	Red, Blue	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/06/04	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
00197	SUPER A/F 1000	Purple, Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01490	SUPER A/F 1000L	Light Brown, Brown, Dark Brown, Light Brown H, Brown H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/06/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01337	SUPER A/F 200 R	Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			

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*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 3/ KOBE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KOBE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01075	SUPER A/F 2000	Light Red, Dark Red, Red, Blue, Black	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2005/11/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/12/17	Others <input type="checkbox"/>
01638	SUPER A/F 2000 A	Purple, Light Red, Red, Light Red N, Red N, Blue, Black (1st coat), Black (2nd coat), Light Red H, Red H, Blue H	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/04/22	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input type="checkbox"/>
01340	SUPER A/F 2000 S	Red, Light Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01504	SUPER A/F 220HS	Light Brown, Brown, Brown S, Light Brown S	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/10/14	Japan <input checked="" type="checkbox"/>
							2021/02/15	Others <input type="checkbox"/>
00194	SUPER A/F 500	Purple, Light Red, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input type="checkbox"/>
01452	SUPER A/F 500 HS	Purple, Light Red, Red, Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/08/06	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
01339	SUPER A/F 500 M	Purple, Red, Light Red, Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
01453	SUPER A/F 500 M HS	Light Red, Red, Light Red N, Red N	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/08/06	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/11/01	Others <input type="checkbox"/>
01439	SUPER A/F 660 HS	Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/11/20	Japan <input checked="" type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2018/12/17	Others <input type="checkbox"/>
01290	SUPER A/F CF SUPER	Red, Light Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2008/05/28	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2020/06/15	Others <input type="checkbox"/>
01341	SUPER A/F CF SUPER NDF	Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2009/04/03	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2020/06/15	Others <input type="checkbox"/>
01263	SUPER A/F CF-10	Purple, Red, Light Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2008/03/18	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2020/06/15	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 4/ KOBE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: KOBE PAINTS, LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01289	SUPER A/F CF-10A	Red, Light Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2008/05/28	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2020/06/15	Others <input type="checkbox"/>
01264	SUPER A/F CF-10L	Purple, Red, Light Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2008/03/18	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/12/17	Others <input type="checkbox"/>
01435	SUPER A/F CF-10LA	Light Red, Red	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2009/11/20	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/12/17	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 5/ KOBE PAINTS, LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

73 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufactured in
01605	A-LF-Sea 100 HS	Brown R, Light Brown R, Blue R	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2015/04/17	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2021/02/15	Others <input type="checkbox"/>
01535	A-LF-Sea 100 HS	Brown A, Light Brown A, Blue A	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2012/10/12	Japan <input checked="" type="checkbox"/>
				731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino)sulfonyl)-1-fluoro-N-(4-methylphenyl)		2018/08/20	Others <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane			
01532	A-LF-Sea 150	Red Brown, Brown, Light Brown, Brown SK, Light Brown SK, Brown EK, Light Brown EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/10/12	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
01651	A-LF-Sea 200	Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/12/07	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/12/07	Others <input type="checkbox"/>
01533	A-LF-Sea 250	Red Brown, Brown, Light Brown, Brown SK, Light Brown SK, Brown EK, Light Brown EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/10/12	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
01606	A-LF-Sea 300 HS	Blue R, Brown R, Light Brown R, Brown E, Light Brown E, Red IM	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2015/04/17	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/04/22	Others <input type="checkbox"/>
01553	A-LF-Sea 400	Brown, Red Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/04/12	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input checked="" type="checkbox"/>
01534	A-LF-Sea 600	Brown, Red Brown, Light Brown, Blue, Brown E, Light Brown E, Brown EK, Light Brown EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2012/10/12	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/12/17	Others <input checked="" type="checkbox"/>

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This list was updated on 2018/06/15

Page 1/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01648	A-LF-Sea 600	Cocoa Brown, Dark Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/10/14	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/02/15	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01653	AQUATERRAS 1000	Brown, Light Brown, Blue	Biocide-free self polishing type				2016/12/07 2020/06/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01654	AQUATERRAS 2000	Brown, Light Brown, Blue	Biocide-free self polishing type				2016/12/07 2020/06/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01655	AQUATERRAS 6000	Brown, Light Brown, Blue	Biocide-free self polishing type				2016/12/07 2020/06/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01656	AQUATERRAS 8000	Brown, Light Brown, Blue, Black	Biocide-free self polishing type				2016/12/07 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01568	BIOFLEX A/F	Red Oxide	Organotin-free conventional type	1317-39-1	Cuprous oxide		2013/08/22 2019/06/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01104	BIOFLEX 800	Brown, Plum, Red Brown	Organotin-free controlled depletion polymer type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2006/03/10	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide		2020/06/15	Others <input checked="" type="checkbox"/>
01466	BIOFLEX 800	Brown C, Dark Brown C, Red Brown C, Red Brown D, Dark Brown D, Brown D	Organotin-free controlled depletion polymer type	1317-39-1	Cuprous oxide		2010/08/06	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2020/02/24	Others <input checked="" type="checkbox"/>
00252	BIOFLEX TECHNO	Red Brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2018/10/15	Others <input type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
00253	BIOFLEX TECHNO	Brown	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2018/10/15	Others <input type="checkbox"/>
01676	DRAFT A/F Super	White, Black	Organotin-free self polishing	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2017/08/25	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2021/04/19	Others <input type="checkbox"/>
00245	ECOLOFLEX SPC	Beetle Black	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2019/02/17	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 2/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00364	ECOLOFLEX SPC 100	Dark Brown, Dark Brown M, Red Brown, Medium Brown, Dark Brown C, Red Brown C	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2005/11/21	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2020/02/24	Others <input checked="" type="checkbox"/>
01325	ECOLOFLEX SPC 100FWR	Red Brown, Dark Brown, Brown C, Light Brown C	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2008/11/27	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input checked="" type="checkbox"/>
01249	ECOLOFLEX SPC 150HyB	Cherry V, Plum V, Brown, Light Brown, Brown C, Light Brown C, Brown B, Light Brown B, Brown SK, Light Brown SK, Brown E, Light Brown E, Brown EK, Light Brown EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2008/01/30	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
01500	ECOLOFLEX SPC100 HS	Red Brown, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/08/05	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/04/19	Others <input checked="" type="checkbox"/>
01485	ECOLOFLEX SPC200	Chocolat K, Light Brown K, Dark Brown K, Brown Z, Light Brown Z	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/03/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/06/14	Others <input checked="" type="checkbox"/>
01501	ECOLOFLEX SPC200 HS	Red Brown, Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2011/08/05	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2021/04/19	Others <input checked="" type="checkbox"/>
01023	ECOLOFLEX SPC2000	Brown, Light Brown, Brown B, Light Brown B	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2005/06/30	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/06/18	Others <input type="checkbox"/>
01102	ECOLOFLEX SPC250 HyB	CherryV, PlumV, Cherry SK, Plum SK, Cherry EK, Plum EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2006/03/10	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/06/15	Others <input checked="" type="checkbox"/>
00368	ECOLOFLEX SPC400	Cherry V, Plum V	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/11/19	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/06/17	Others <input type="checkbox"/>

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This list was updated on 2018/06/15

Page 3/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01328	ECOLOFLEX SPC400 HyB	Cherry V, Plum V, Brown, Light Brown, Black	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2009/01/23	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/04/22	Others <input checked="" type="checkbox"/>
00370	ECOLOFLEX SPC600	Dark Brown, Red Brown, Cherry V, Plum V, Blue, Blue V, Green	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/11/19	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/04/22	Others <input type="checkbox"/>
01476	ECOLOFLEX SPC600	Pink, Cherry S	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2010/10/01	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/04/13	Others <input type="checkbox"/>
00371	ECOLOFLEX SPC600 HyB	Cherry V, Plum V, Cherry F, Plum F, Extra Cherry, Extra Plum, Red Brown, Red, Black, Green, Brown, Light Brown, Brown V, Cherry E, Plum E, Cherry EK, Plum EK	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/11/19	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2018/12/17	Others <input checked="" type="checkbox"/>
01657	ECOLOFLEX SPC600 HyB	Cocoa Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2017/02/24	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/02/24	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00243	ECOLOFLEX SPC700	Cherry V, Plum V	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2020/04/13	Others <input type="checkbox"/>
00363	ECOLOSILK	Gray, White, Red, Black, Green, Signal Red, Blue	Biocide-free silicone type	-	-		2004/10/26	Japan <input checked="" type="checkbox"/>
							2020/04/13	Others <input type="checkbox"/>
01576	ECOLOSILK 100	Red Brown, Brown, Light Brown, Red, Blue, Green, White, Black, Yellow, Gray	Biocide-free silicone type	-	-		2014/02/14	Japan <input checked="" type="checkbox"/>
							2020/02/24	Others <input type="checkbox"/>
01191	ECOLOSILK 600	Red	Biocide-free silicone type	-	-		2007/03/13	Japan <input checked="" type="checkbox"/>
							2018/10/15	Others <input type="checkbox"/>
01575	ECOLOSILK 700	Red Brown, Brown, Light Brown, Red, Blue, Green, White, Black, Yellow, Gray	Biocide-free silicone type	-	-		2014/02/14	Japan <input checked="" type="checkbox"/>
							2020/02/24	Others <input type="checkbox"/>

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Page 4/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01622	ECOLOSIK 800	Brown, Red Brown, Light Brown, Red, Blue, Green, White, Black, Yellow, Gray	Biocide-free silione type				2015/08/21 2018/08/20	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01681	ECOLOSIK AXEL	MARIGOLD	Biocide-free silicone type				2017/12/04 2021/06/14	Japan <input checked="" type="checkbox"/> Others <input checked="" type="checkbox"/>
01664	Fisherman's HISOL	Red	Organotin-free ablative type	1111-67-7 28159-98-0	Cuprous Thiocyanate 2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2017/04/14 2020/04/13	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00294	HISOL 100	Brown, Light Brown, Blue, Brown S	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2004/05/21 2018/02/19	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01609	HISOL 100	Brown F, Blue F, Light Brown R	Organotin-free self polishing type	122454-29-9 13463-41-7	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide		2015/04/17 2021/02/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00296	HISOL 300	Brown, Light Brown, Brown S, Red	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2004/05/21 2018/06/18	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01610	HISOL 300	Brown F, Light Brown R, Brown R	Organotin-free self polishing type	122454-29-9 13463-41-7	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide		2015/04/17 2021/02/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01326	JYUNPU	Red, Black, Blue	Organotin-free self polishing type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2008/11/27 2020/08/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01227	LF-Sea 100 HS	Brown, Light Brown, Blue, Brown S, Blue S	Organotin-free self polishing type	13463-41-7 971-66-4	Zinc-2-pyridinethiol-1-oxide Pyridine-triphenylborane		2007/07/26 2018/02/19	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01608	LF-Sea 100 HS	Brown R, Light Brown R, Blue R, Brown E, Light Brown E	Organotin-free self polishing type	122454-29-9 13463-41-7	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide		2015/04/17 2021/02/15	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01640	LF-Sea 100 HS	Brown EX, Light Brown EX	Organotin-free self polishing type	122454-29-9 13463-41-7 64359-81-5	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2016/06/17 2019/06/17	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 5/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01250	LF-Sea 150 HyB	Brown, light Brown, Brown K, Light Brown K, Brown SK, Light Brown SK, B Brown SK, B light Brown SK	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2008/01/30 2019/12/07	Japan	<input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others	<input checked="" type="checkbox"/>
01228	LF-Sea 250 HyB	Cherry, Plum, Cherry SK, Plum SK	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2007/07/26 2021/02/15	Japan	<input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others	<input checked="" type="checkbox"/>
01262	LF-Sea 300 HS	Blue A, Brown A, Light Brown A	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide	2008/03/18 2018/04/16	Japan	<input checked="" type="checkbox"/>
				731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino) sulfonyl)-1-fluoro-N-(4-methylphenyl)		Others	<input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane			
01607	LF-Sea 300 HS	Brown R, Light Brown R, Blue R	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H- pyrrole-3-carbonitrile	2015/04/17 2021/02/15	Japan	<input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		Others	<input type="checkbox"/>
01244	LF-Sea 400 HyB	Cherry, Plum, Brown, Light Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2007/12/10 2019/04/22	Japan	<input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others	<input checked="" type="checkbox"/>
01652	LF-Sea 600	Cherry S, Plum S	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2016/12/07 2019/12/07	Japan	<input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others	<input type="checkbox"/>
01226	LF-Sea 600 HyB	Cherry, Plum, Cherry D, Plum D, Blue D, Red, Blue, Cherry G, Plum G, Cherry J, Plum J	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2007/07/26 2018/08/20	Japan	<input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		Others	<input checked="" type="checkbox"/>
01612	MARIART X	Black, White, Gray	Organotin-free ablative type	1111-67-7	Cuprous Thiocyanate	2015/06/19 2021/04/19	Japan	<input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s- triazine		Others	<input type="checkbox"/>
01382	MASSIVE	Black, White, Gray, Blue, Red	Organotin-free ablative type	1111-67-7	Cuprous Thiocyanate	2009/04/03 2018/08/20	Japan	<input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s- triazine		Others	<input type="checkbox"/>
00246	NIPPE STRONG 7000	Cherry	Organotin-free self polishing type	1317-39-1	Cuprous oxide	2004/03/18 2018/10/15	Japan	<input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		Others	<input type="checkbox"/>
01078	PROPELLER ICHIBAN	Blue	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide	2005/11/21 2020/04/13	Japan	<input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		Others	<input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 6/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: NIPPON PAINT MARINE COATINGS CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
01680	PROPELLER ICHIBAN	Blue M	Organotin-free self polishing type	1111-67-7	Cuprous Thiocyanate		2017/12/04	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2020/12/03	Others <input type="checkbox"/>
01677	SEACHEST GUARD	Red	Organotin-free self polishing	1317-39-1	Cuprous oxide		2017/08/25	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2020/08/24	Others <input type="checkbox"/>
01077	SEACHEST SUPERGUARD A/F	Red, Gray	Organotin-free ablative type	1317-39-1	Cuprous oxide		2005/11/21	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2020/04/13	Others <input type="checkbox"/>
01642	SILYL A/F PAINT FOR SHIP'S BOOTTOP	Black	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/06/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/06/17	Others <input type="checkbox"/>
01641	SILYL A/F PAINT FOR SHIP'S BOTTOM	Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2016/06/17	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/06/17	Others <input type="checkbox"/>
01014	UNAGI TORYO ICHIBAN	Blue, Green, Red, Brown, Retro Red, Blue Kai	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2005/06/30	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/02/17	Others <input type="checkbox"/>
01443	UNAGI TORYO ICHIBAN	Azayaka White 1	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2010/01/22	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2019/02/17	Others <input type="checkbox"/>
01624	UNAGI TORYO ICHIBAN	Black	Organotin-free ablative type	1111-67-7	Cuprous Thiocyanate		2015/12/18	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2018/12/17	Others <input type="checkbox"/>
01623	UNAGI TORYO ICHIBAN AZAYAKA	Red, Blue, White	Organotin-free ablative type	1111-67-7	Cuprous Thiocyanate		2015/10/16	Japan <input checked="" type="checkbox"/>
				28159-98-0	2-methylthio-4-tert-butylamino-6-cyclopropylamino-s-triazine		2019/08/26	Others <input type="checkbox"/>
01555	UNAGI TORYO ICHIBAN AZAYAKA SUPER	Black, Red, Blue, White, Beetle Black, Venus White, Beetle Gray, K-line Gray	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/06/18	Japan <input checked="" type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2021/06/14	Others <input checked="" type="checkbox"/>
01448	UNAGI TORYO ICHIBAN AZAYAKA TOKUJYOU	Red A1, Blue A1	Organotin-free self polishing type	13463-41-7	Zinc-2-pyridinethiol-1-oxide		2010/01/22	Japan <input checked="" type="checkbox"/>
				731-27-1	Methanesulfenamide, 1,1-dichloro-N-((dimethylamino) sulfonyl)-1-fluoro-N-(4-methylphenyl)		2019/02/17	Others <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane			
01570	UNAGI TORYO ICHIBAN LF-Sea	Blue, Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2013/10/11	Japan <input checked="" type="checkbox"/>
				14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-		2019/10/14	Others <input type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 7/ NIPPON PAINT MARINE COATINGS CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: PPG PMC JAPAN CO.,LTD.
8F, Shintetsu Bldg., 1-1-1 Daikaidori, Hyogo-ku, Kobe-shi, HYOGO

*Continuation process must be taken every 3 years for each system.
*Registered Systems Listed in alphabetical Order.

27 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of: Registration Expiry	Manufactured in
00083	Crown Color Sentei Toryou YS Musuzu	Red, Red Brown	Organotin-free ablativ type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide	2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00084	Crown Color Sentei Toryou YS Musuzu	Blue	Organotin-free ablativ type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00081	Crown Super 243	Red, Black	Organotin-free self polishing type	1317-39-1 330-54-1 64359-81-5	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2004/03/18 2020/08/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00082	Crown Super 243	Red Brown	Organotin-free self polishing type	1317-39-1 1897-45-6 330-54-1	Cuprous oxide 2,4,5,6-Tetrachloroisophthalonitrile 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00086	Marine Super TF-100	Red Brown	Organotin-free ablativ type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide	2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
00087	Rabal A/F	Red Brown	Organotin-free ablativ type	1317-39-1	Cuprous oxide	2004/03/18 2019/04/22	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01256	Sigma Alphagen 230	Brown, Red Brown, Black, Blue, Grey, Green	Organotin-free self polishing type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	2008/01/30 2020/02/24	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01106	Sigma Alphagen 240	Red Brown, Brown	Organotin-free self polishing type	1317-39-1 64359-81-5	Cuprous oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2006/03/10 2020/02/24	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01114	Sigma Alphagen 650	Redbrown, Brown	Organotin-free self polishing type	1317-39-1 64359-81-5	Cuprous oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2006/04/25 2020/02/24	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01025	Sigma Boatmax	Blue	Organotin-free self polishing type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	2005/09/01 2020/08/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01026	Sigma Boatmax	Red, Black	Organotin-free self polishing type	1317-39-1 330-54-1 64359-81-5	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one	2005/09/01 2020/08/24	Japan <input checked="" type="checkbox"/> Others <input type="checkbox"/>
01513	Sigma EcoFleet 290S	Brown, Red Brown	Organotin-free self-polishing	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide	2011/12/07 2020/12/03	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>

[NOTE] Registered products are recognised to be compliant with IMO "International Convention on the Control of Harmful Anti-fouling Systems on Ships".

Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 1/ PPG PMC JAPAN CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: PPG PMC JAPAN CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00068	Sigma EcoFleet 530	Brown, Red Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2019/04/22	Others <input checked="" type="checkbox"/>
01257	Sigma KAISEN M	New Red, New Blue	Organotin-free self polishing type	64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2008/04/03	Japan <input checked="" type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2020/02/24	Others <input type="checkbox"/>
00079	Sigma MANKAI	Red, Red Brown	Organotin-free ablative type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2004/03/18	Japan <input checked="" type="checkbox"/>
				1317-39-1	Cuprous oxide		2019/04/22	Others <input type="checkbox"/>
00080	Sigma MANKAI	Blue	Organotin-free ablative type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2019/04/22	Others <input type="checkbox"/>
01558	Sigma Nexeon 710	Brown, Red Brown	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/10/11	Japan <input type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/08/26	Others <input checked="" type="checkbox"/>
01559	Sigma Nexeon 750	Brown, Red Brown, Light Grey	Organotin-free self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile		2013/08/22	Japan <input type="checkbox"/>
				13463-41-7	Zinc-2-pyridinethiol-1-oxide		2019/08/26	Others <input checked="" type="checkbox"/>
01697	Sigma Sailadvance GX	Brown, Red Brown	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2018/02/16	Japan <input type="checkbox"/>
				1317-39-1	Cuprous oxide		2021/02/15	Others <input checked="" type="checkbox"/>
01663	Sigma Sailadvance RX	Brown, Red Brown	Organotin-free self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2017/02/24	Japan <input type="checkbox"/>
				1317-39-1	Cuprous oxide		2020/02/24	Others <input checked="" type="checkbox"/>
01161	Sigma SylAdvance 800	Brown, Red Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2007/01/25	Japan <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2019/04/22	Others <input checked="" type="checkbox"/>
00076	Sigma TAIKAI	Red	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan <input checked="" type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2019/04/22	Others <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00077	Sigma TAIKAI	Red Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan <input checked="" type="checkbox"/>
				1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2019/04/22	Others <input type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
00453	Sigmaglide 890	Clear, Redbrown, Blue, Black, Red	Biocide-free silicone type	-	-		2005/02/17	Japan <input type="checkbox"/>
							2020/02/24	Others <input checked="" type="checkbox"/>
01510	Sigmaglide 990	Dark Red, Dark Blue	Biocide-free silicone type	-	-		2011/12/07	Japan <input type="checkbox"/>
							2020/12/03	Others <input checked="" type="checkbox"/>

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Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 2/ PPG PMC JAPAN CO.,LTD.



JPMA List of Registered Organotin-free Anti-fouling Systems

Name of Manufacturer: PPG PMC JAPAN CO.,LTD.

*Continuation process must be taken every 3 years for each system.

*Registered Sytems Listed in alphabetical Order.

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured
							Expiry	in
00071	Sigmaglidle LSE Finish	Clear	Biocide-free silicone type	-	-		2004/06/21	Japan <input type="checkbox"/>
							2019/04/22	Others <input checked="" type="checkbox"/>
00085	Sigmaplane ECOL A/F HA (J)	Red Brown	Organotin-free self polishing type	1317-39-1	Cuprous oxide		2004/03/18	Japan <input checked="" type="checkbox"/>
				1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2019/04/22	Others <input type="checkbox"/>
				330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			

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Other properties of registered products, such as Anti-fouling performance or safety properties, are not recognized.

*Product name case is typed as on the application form.

This list was updated on 2018/06/15

Page 3/ PPG PMC JAPAN CO.,LTD.



Name of Manufacturer: WAKO ECO PAINT Inc.

*Continuation process must be taken every 3 years for each system.

*Registered Systems Listed in alphabetical Order.

5 products registered as of 2018/06/15

Reg.No.	Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration	Manufactured in
							Expiry	
01525	ECO AF-E	Light Red, Brown Red	Tin-Free Effluent Control Antifouling Paint	1317-39-1	Cuprous oxide	*	2012/08/03	Japan <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2018/06/18	Others <input checked="" type="checkbox"/>
01639	ECO AF-K	Blue 1	Tin-Free Effluent Control Antifouling Paint	1317-39-1	Cuprous oxide		2016/04/22 2019/04/22	Japan <input type="checkbox"/> Others <input checked="" type="checkbox"/>
01524	ECO AF-S	Light Red, Brown Red	Tin-Free Effluent Control Antifouling Paint	1317-39-1	Cuprous oxide	*	2012/08/03	Japan <input type="checkbox"/>
				64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2018/06/18	Others <input checked="" type="checkbox"/>
01528	ECO AF-Z	Red	Tin-Free Effluent Control Antifouling Paint	330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	*	2012/06/01	Japan <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/06/18	Others <input checked="" type="checkbox"/>
01529	ECO AF-Z	Blue	Tin-Free Effluent Control Antifouling Paint	330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea	*	2012/06/01	Japan <input type="checkbox"/>
				971-66-4	Pyridine-triphenylborane		2018/04/16	Others <input checked="" type="checkbox"/>

*Continuation application in process