## Self-Regulatory Management of Japan Paint Manufacturers Association to comply with IMO's International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 JPMA List of Registered Organotin-free / Cybutryne-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.

8F, Shintetsu Bldg., 1-1-1 Daikaidori, Hyogo-ku, Kobe-shi, HYOGO

30 products registered as of 2024/10/18

Reg.No. Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	Dates of:	Registration Expiry	Manufac in	
00083 Crown Color Sentei Toryou YS Musuzu	Red, Red Brown	Ablative type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2004/03/18 2024/12/02	Japan	<b>~</b>
			1317-39-1	Cuprous oxide			Others	
00084 Crown Color Sentei Toryou YS Musuzu	Blue	Ablative type	1317-39-1	Cuprous oxide		2004/03/18 2024/12/02	Japan	<b>✓</b>
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			Others	
00081 Crown Super 243	Red, Black	Self polishing type	1317-39-1	Cuprous oxide		2004/03/18 2026/06/15	Japan	~
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			Others	
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one				
00082 Crown Super 243	Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2004/03/18 2024/12/02	Japan	<b>V</b>
			1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile			Others	
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea				
00086 Marine Super TF-100	Red Brown	Ablative type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2004/03/18	Japan	<b>✓</b>
			1317-39-1	Cuprous oxide		2024/12/02	Others	
00087 Rabal A/F	Red Brown	Ablative type	1317-39-1	Cuprous oxide		2004/03/18	Japan	~
						2024/12/02	Others	
01114 Sigma Alphagen 650	Redbrown, Brown	Self polishing type	1317-39-1	Cuprous oxide		2006/04/25 2025/12/12	Japan	
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			Others	<b>~</b>
01025 Sigma Boatmax	Blue	Self polishing type	1317-39-1	Cuprous oxide	2005/09/01	Japan	~	
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2026/06/15	Others	
01026 Sigma Boatmax	Red, Black	Self polishing type	1317-39-1	Cuprous oxide	2005/09/01		Japan	~
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2026/06/15	Others	
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one				
01727 Sigma EcoFleet 270	Brown, Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2019/08/09	Japan	Ţ
						2025/06/16	Others	<b>✓</b>

[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.

This list was updated as of 2024/10/18

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01513 Sigma EcoFleet 290S	Brown, Red Brown	Self-polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2011/12/07	Japan ☐ Others ✔
			1317-39-1	Cuprous oxide		2026/10/26	Others <b></b>
00068 Sigma EcoFleet 530	Brown, Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2025/10/20	Others <a>V</a>
01257 Sigma KAISEN M	New Red, New Blue	e Self polishing type	64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2008/04/03	Japan 🗹
			971-66-4	Pyridine-triphenylborane		2025/12/12	Others $\square$
00079 Sigma MANKAI	Red, Red Brown	Ablative type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2004/03/18	Japan 🗹
			1317-39-1	Cuprous oxide		2024/12/02	Others
00080 Sigma MANKAI	Blue	Ablative type	1317-39-1	Cuprous oxide		2004/03/18	Japan 🗹
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2024/12/02	Others $\square$
01558 Sigma Nexeon 710	Brown, Red Brown	Self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)- pyrrole-3-carbonitrile	1H-	2013/10/11 2025/06/16	Japan ☐ Others ✔
			13463-41-7	Zinc-2-pyridinethiol-1-oxide			
01559 Sigma Nexeon 750	Brown, Red Brown, Light Grey	Self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)pyrrole-3-carbonitrile	1H-	2013/08/22 2025/06/16	Japan ☐ Others ✔
			13463-41-7	Zinc-2-pyridinethiol-1-oxide			
01829 Sigma Sailadvance DX (II)	Brown, Red Brown	Self polishing type	1317-39-1	Cuprous oxide			Japan
			14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)	O,S)-		Others 🗸
01697 Sigma Sailadvance GX	Brown, Red Brown	Self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)			Japan
			1317-39-1	Cuprous oxide		2025/10/20	Others <a>V</a>
01826 Sigma Sailadvance NX	Brown, Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2022/10/21	Japan 🖳
			14915-37-8	Copper, bis(1,hydroxy-2(1H)-pyridinethionato 0,S)	)—	2025/10/20	Others 🗹
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
01663 Sigma Sailadvance RX	Brown, Red Brown	Self polishing type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2017/02/24	Japan ☐ Others ✓
			1317-39-1	Cuprous oxide		2025/10/20	Others 🗹

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00076 Sigma TAIKAI	Red	Self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan 🗹
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2024/12/02	Others $\square$
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one			
00077 Sigma TAIKAI	Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2004/06/21	Japan 🗹
-			1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2024/12/02	Others
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
01747 Sigmaglide 1290	Redbrown, Dark Blue, Black	Biocide-free silicone type				2020/07/29	Japan
						2026/06/15	Others <a>V</a>
01841 Sigmaglide 2390	Redbrown, blue, black, grey, white	Biocide-free silicone type				2023/10/27	Japan
						2026/10/26	Others <a>V</a>
00453 Sigmaglide 890	Clear, Redbrown, Blue, Black, Red	Biocide-free silicone type	_	-		2005/02/17	Japan
						2025/10/20	Others 🗹
01510 Sigmaglide 990	Dark Red, Dark Blu	e Biocide-free silicone type	-	-		2011/12/07	Japan 🔲
						2026/10/26	Others 🗹
00071 Sigmaglide LSE Finish	Clear	Biocide-free silicone type	_	-		2004/06/21	Japan
						2024/12/02	Others 🗹
00085 Sigmaplane ECOL A/F HA (J)	Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2004/03/18	
			1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2024/12/02	Others $\square$
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea			
01842 Sigmarine 530	Redbrown, Brown, Black, Blue, Spruce Green	. 0 ,	1317-39-1	Cuprous oxide		2023/10/27	Japan
			64359-81-5 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2026/10/26	Others 🗹	
	GIECH						