## 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

## 31 products registered as of 2025/04/18

Reg.No. Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC) Date	es of:	Registration Expiry	Manufac in	
00083 Crown Color Sentei Toryou YS	Red, Red Brown	Ablative type	12122-67-7	Zinc ethylenebis (dithiocarbamate)		2004/03/18	- 1	<b>✓</b>
Musuzu			1317-39-1	Cuprous oxide		2027/12/17	Others	
00084 Crown Color Sentei Toryou YS Musuzu	Blue	Ablative type	1317-39-1	Cuprous oxide		2004/03/18 2024/12/02		
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea				
00081 Crown Super 243	Red, Black	Self polishing type	1317-39-1	Cuprous oxide		2004/03/18	Japan	<b>V</b>
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2026/06/15	Others	; L
			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	o exp ex	<b>V</b>
			1897-45-6	2,4,5,6-Tetrachloroisophthalonitrile		2024/12/02	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	0 10	<u> </u>
			1317-39-1	Cuprous oxide		2024/12/02	Others	s $\square$
01868 PPG Nexeon 810	Brown Redbrown	Self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1-pyrrole-3-carbonitrile		2025/02/21 2028/02/21	Japan Others	<b>✓</b>
			13463-41-7	Zinc-2-pyridinethiol-1-oxide				
			86347-14-0	4-[1-(2,3-dimethylphenyl)ethyl]-1H-imidazole				
00087 Rabal A/F	Red Brown	Ablative type	1317-39-1	Cuprous oxide		2004/03/18 2024/12/02	Japan Others	
01114 Sigma Alphagen 650	Redbrown, Brown	Self polishing type	1317-39-1	Cuprous oxide		2006/04/25		
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2025/12/12		
01025 Sigma Boatmax	Blue	Self polishing type	1317-39-1	Cuprous oxide		2005/09/01		<b>V</b>
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2026/06/15		
01026 Sigma Boatmax	Red, Black	Self polishing type	1317-39-1	Cuprous oxide		2005/09/01	Japan	<b>V</b>
			330-54-1	3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2026/06/15	Others	; <u> </u>
			64359-81-5	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one				

[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 2025/04/18

<sup>\*</sup>Product name case is typed as on the application form.

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Reg.No. Name of anti-fouling system	Colour(s)	Type of anti-fouling system	CAS No.	Chemical name (IUPAC)	ates of:	Registration Expiry	Manufactured in
01727 Sigma EcoFleet 270	Brown, Red Brown	Self polishing type	1317-39-1	Cuprous oxide		2019/08/09 2025/06/16	Japan ☐ Others ✓
01513 Sigma EcoFleet 290S	Brown, Red Brown	Self-polishing type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide		2011/12/07 2026/10/26	Japan U Others ✓
00068 Sigma EcoFleet 530	Brown, Red Brown	Self polishing type	1317-39-1 64359-81-5	Cuprous oxide 4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one		2004/06/21 2025/10/20	Japan ☐ Others ✓
01257 Sigma KAISEN M	New Red, New Blue	e Self polishing type	64359-81-5 971-66-4	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one Pyridine-triphenylborane		2008/04/03 2025/12/12	Japan ✓ Others
00079 Sigma MANKAI	Red, Red Brown	Ablative type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide		2004/03/18 2024/12/02	Japan V Others
00080 Sigma MANKAI	Blue	Ablative type	1317-39-1 330-54-1	Cuprous oxide 3-(3,4-Dichlorophenyl)-1, 1-dimethyl urea		2004/03/18 2024/12/02	Japan <u>✓</u> Others
01558 Sigma Nexeon 710	Brown, Red Brown	Self polishing type	122454-29-9	4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1 pyrrole-3-carbonitrile	1H-	2013/10/11 2025/06/16	Japan ☐ Others ✓
01559 Sigma Nexeon 750	Brown, Red Brown, Light Grey	Self polishing type	13463-41-7 122454-29-9 13463-41-7	Zinc-2-pyridinethiol-1-oxide  4-Bromo-2-(4-chlorophenyl)-5-(trifluoromethyl)-1 pyrrole-3-carbonitrile Zinc-2-pyridinethiol-1-oxide	1H-	2013/08/22 2025/06/16	Japan ☐ Others ✓
01829 Sigma Sailadvance DX (II)	Brown, Red Brown	Self polishing type	1317-39-1 14915-37-8	Cuprous oxide Copper, bis(1,hydroxy-2(1H)-pyridinethionato O,S)-	-	2022/12/13 2025/12/12	Japan ☐ Others ☑
01697 Sigma Sailadvance GX	Brown, Red Brown	Self polishing type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide		2018/02/16 2025/10/20	Japan ☐ Others ✓
01826 Sigma Sailadvance NX	Brown, Red Brown	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	-	2022/10/21 2025/10/20	Japan ☐ Others ✔
01663 Sigma Sailadvance RX	Brown, Red Brown	Self polishing type	12122-67-7 1317-39-1	Zinc ethylenebis (dithiocarbamate) Cuprous oxide		2017/02/24 2025/10/20	Japan ☐ Others ☑

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00076 Sigma TAIKAI  Red  Self polishing type  1317-39-1  Cuprous oxide 330-54-1  3-(3,4-Dichlorophenyl 64359-81-5  4,5-Dichloro-2-n-octy  00077 Sigma TAIKAI  Red Brown  Self polishing type  1317-39-1  Cuprous oxide	1)-1, 1-dimethyl urea  2027/12/17   0  2y -4-isothiazolin-3-one  2004/06/21   3	Japan 🗹 Others 🗆
64359-81-5 4,5-Dichloro-2-n-octy	1)-1, 1-dimethyl urea <u>cyl-4-isothiazolin-3-one</u> 2004/06/21	
	2004/06/21	
00077 Sigma TAIKAI Red Brown Self polishing type 1317-39-1 Cuprous oxide		
		Japan 👱
1897-45-6 2,4,5,6-Tetrachloroiso	ophthalonitrile 2024/12/02 (	Others $\square$
330-54-1 3-(3,4-Dichlorophenyl	l)–1, 1–dimethyl urea	
01747 Sigmaglide 1290 Redbrown, Dark Biocide-free silicone type		Japan 🔲
Blue, Black	2026/06/15	Others 🗹
01841 Sigmaglide 2390 Redbrown, blue, Biocide-free silicone type	2023/10/27	Japan
black, grey, white	2026/10/26	Others 🗹
00453 Sigmaglide 890 Clear, Redbrown, Biocide-free silicone type	2005/02/17	Japan 🔲
Blue, Black, Red	2025/10/20	Others 🗹
01510 Sigmaglide 990 Dark Red, Dark Blue 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   0	Others 🗹
00085 Sigmaplane ECOL A/F HA (J) Red Brown Self polishing type 1317-39-1 Cuprous oxide		Japan 🔽
1897-45-6 2,4,5,6-Tetrachloroiso	ophthalonitrile 2024/12/02   0	Others $\square$
330-54-1 3-(3,4-Dichlorophenyl	I)−1, 1−dimethyl urea	
01842 Sigmarine 530 Redbrown, Brown, Self polishing type 1317–39–1 Cuprous oxide		Japan 🔲
Black, Blue, Spruce Green  64359-81-5  4,5-Dichloro-2-n-octy	zyl-4-isothiazolin-3-one	Others 🗹