

Determination of Compliance with Reduction Scheme for Coatings Materials

BAE SYSTEMS SUBMARINES, BARROW-IN-FURNESS

Instructions: The below data sheet provides an easy-to-use tool to determine whether your installation meets the Reduction Scheme solvent:solids ratio. Please enter the data in the yellow boxes as required. When all your data has been entered the spreadsheet will automatically calculate your solvent balance and allowable solvent under the Reduction Scheme and display the difference. The message at the bottom of the table tells you whether your installation meets the Reduction scheme solvent:solids ratio.

If Extra rows are required for a table then press the appropriate insert row button found in the top right of the table

Target Emission Factor

Period Covered

COATINGS USED IN ACTIVITY:

Ref	Type of Product	Description of Use of Product	VOC g/kg or g/litre of product supplied as specified by supplier	Solids g/kg or g/litre of product supplied as specified by supplier	Litres or kg of product used in period as supplied	Mass of solids used in kg	Mass of solvent used in kg	Target Emission Factor from Table 4 of Guidance Note	Allowable solvent for product in kg under Reduction Scheme	Solvent balance in kg against allowable solvent under Reduction Scheme
1	Sigma Aquacover 500		6	676	245	165.62	1.47	0.6	99.372	97.902
2	Amerlock 400 (Sigmacover 400)		163	1190	1891	2250.29	308.233	0.6	1350.174	1041.941
3	SHERWIN WILLIAMS FAST CLAD ER EPOXY		147	1595	21	33.495	3.087	0.6	20.097	17.01
4	Belzona 111/1121		0	2880	1	2.88	0	0.6	1.728	1.728
5	SHERWIN BIOGARD M630 GOLDEN YELLOW & or LIGHT GREY		2	1340	47	62.98	0.094	0.6	37.788	37.694
6	Sherwin Williams Macropoxy M630V2 (Biogard M630 Pebble)		2	560	268	150.08	0.536	0.6	90.048	89.512
7	Bostik 9252 Primer		700	300	33	9.9	23.1	0.6	5.94	-17.16
8	CTL2 Hyperlast 7980007/7855096 (Dow Hyperlast 5096)		0	710	917	651.07	0	0.6	390.642	390.642
9	CANTL Hyperlast 2851245/2875044		0	2020	780	1575.6	0	0.6	945.36	945.36
10	Cilrelease 400		810	90	6	0.54	4.86	0.6	0.324	-4.536
11	Maker Corroless EPF Black Hardener		80	1469	569	835.861	45.52	0.6	501.5166	455.9966
12	Maker Corroless EPF Rust Primer		80	1469	175	257.075	14	0.6	154.245	140.245
13	Maker Corroless RF35		93	1248	559	697.632	51.987	0.6	418.5792	366.5922

14	SHERWIN WILLIAMS Sher-Cryl M770 (ENVIROGARD M770 PEBBLE WATER BASED)		129	456.3	951	433.941	122.679	0.6	260.36478	137.68578
15	SHERWIN WILLIAMS ENVOY ANTI-FOULING TF 500		388	1449	431	624.519	167.228	0.6	374.7114	207.4834
16	SHERWIN WILLIAMS Epidek M377 BLACK		336	1202	157	188.714	52.752	0.6	113.2284	60.4764
17	Sherwin Williams Macropoxy C425V2 (Epigrip C425)		249	1155	1850	2136.75	460.65	0.6	1282.05	821.4
18	SHERWIN WILLIAMS J984 ZINC RICH PRIMER GREY		399	1860	40	74.4	15.96	0.6	44.64	28.68
19	SHERWIN WILLIAMS Micropoxy L524 (Epigrip L524)		344	986	1917	1890.16	659.448	0.6	1134.0972	474.6492
20	SHERWIN WILLIAMS M922m MASTIC ALUMINIUM		179	1386	94	130.284	16.826	0.6	78.1704	61.3444
21	SHERWIN WILLIAMS Macropoxy M262 (Epigrip M262)		386	900	15	13.5	5.79	0.6	8.1	2.31
22	SHERWIN WILLIAMS EPIGRIP M922 all colours		167	1319.7	1018	1343.45	170.006	0.6	806.07276	636.06676
23	FIWA Sealant		0	1253	156.5	196.095	0	0.6	117.6567	117.6567
24	Flushing Fluid Oil Hyperlast 4162147		0	0	97.5	0	0	0.6	0	0
25	Gummipaint		770	230	2	0.46	1.54	0.6	0.276	-1.264
26	Sherwin Williams C530		419	590	240	141.6	100.56	0.6	84.96	-15.6
27	SHERWIN WILLIAMS EPIGRIP M671 Undercoat		391	827	5	4.135	1.955	0.6	2.481	0.526
28	SHERWIN WILLIAMS Magnalux 41V (DURAGLASS 41V)		1.19	1362	75	102.15	0.08925	0.6	61.29	61.20075
29	SHERWIN WILLIAMS Macropoxy G280 (METAGARD G280)		643	310.5	100	31.05	64.3	0.6	18.63	-45.67
30	Sherwin Williams Macropoxy L574 (Metagard L574 Red Oxide)		621	368	1875	690	1164.38	0.6	414	-750.375
31	SIGMA PHENGUARD 930, 935, 940 WHITE, PINK, GREY		300	1122	148	166.056	44.4	0.6	99.6336	55.2336
32	Release agent R801		10	910	3.7	3.367	0.037	0.6	2.0202	1.9832
33	SHERWIN WILLIAMS RESISTEX M535		572	396	130	51.48	74.36	0.6	30.888	-43.472
34	SHERWIN WILLIAMS Acrolon C237 (RESISTEX 237)		443	756	5	3.78	2.215	0.6	2.268	0.053
35	Sikaflex 221	45.5		1254.5	343	430.294	15.6065	0.6	258.1761	242.5696
36	Syntactic Foam Resin (SER300, Crayamid 960Niax SC154)	0		1060	208	220.48	0	0.6	132.288	132.288
37	Trimite P8000 (Powder Coating)		0	1600	1865	2984	0	0.6	1790.4	1790.4
38	Trimite Q55X		458	550	95	52.25	43.51	0.6	31.35	-12.16
39	Trimite Q50		420	550	20	11	8.4	0.6	6.6	-1.8
40	Wessex WRA519 Primer		0	1000	387	387	0	0.6	232.2	232.2
41	INTERNATIONAL INTERTHERM 50 ALUMINIUM		495	508.5	86	43.731	42.57	0.6	26.2386	-16.3314
42	SHERWIN WILLIAMS L716		420	683.4	5	3.417	2.1	0.6	2.0502	-0.0498
43	INTERNATIONAL INTERGARD 269		450	823	5	4.115	2.25	0.6	2.469	0.219

OTHER SOLVENTS USED IN ACTIVITY E.G. THINNING/CLEANING :

Ref	Type of Thinning/Cleaning or Other Solvent Used	Specific Gravity from Supplier	Litres used in period	Mass of other solvent used (kg)
1	Methylene Chloride	1.32	48	-63.36
2	Enviromose	1.01	170	-171.7
3	Leighs No.1	0.8	25	-20
4	Leighs No.3	0.77	50	-38.5
5	Leighs No.5	0.89	1402	-1247.78
6	Leighs No.9	0.84	1330	-1117.2
7	Corroless No.4	0.86	360	-309.6
8	Corroless No.6	0.86	661	-568.46
9	Thinner 90-58	0.85		0
10	Sigma thinner 91-92	0.85	540	-459
11	Bostik M501 Thinners	0.785	168	-131.88

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SOLVENTS REMOVED FROM THE SITE AS WASTE

Ref	Type of waste	Estimated amount of solvent in waste (g/litre)	Amount of waste removed from site (litres)	Mass of solvent disposed of (kg)
1	Collected waste (assumed 3% paint, of which half solvent)			0

SUMMARY OF COMPLIANCE WITH THE REDUCTION SCHEME

Total solids used (kg)	19,055
Total solvent used in coatings (kg)	3,692
Total solvent used in thinners (kg)	4,127
Total solvent consumption (kg)	7,820
Mass of solvent disposed of (kg)	0
Target emission (kg)	11,433
Actual emission (kg)	7,820
Difference (kg)	3,613

The mix of products, thinners and equipment cleaning solvents used shows the installation meets the Reduction Scheme solvent:solids ratio