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	0.6
Period Covered	**1st Nov 2011 - 31st Oct 2012**

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 12 month 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		0	520	55	28.6	0	0.6	17	17
2	Sigmacover 640		106	1299.5	6563	8528.62	695.678	0.6	5117	4421
3	Ameron 71		435	693.3	25	17.3325	10.875	0.6	10	0
4	Anti ozanant *		0	0	0	0	0	0.6	0	0
5	Ambersil Release		128	190	0	0	0	0.6	0	0
5	Belzona 111/1121		0	2880	0	0	0	0.6	0	0
6	Belzona 2121 Elastomer		0	1150	0	0	0	0.6	0	0
7	Biogard M630 Pebble		0	884.8	395	349.496	0	0.6	210	210
8	Bostik 9252 Primer		690	280	73.5	20.58	50.715	0.6	12	-38

9	CANTL Hyperlast 2851245/2875044		0	2020		0	0	0.6	0	0
10	Chromate primer PR143		570	930	0	0	0	0.6	0	0
11	Cilcoat S260 Laquer		770	105	0	0	0	0.6	0	0
12	Cilrelease 400		810	90	1	0.09	0.81	0.6	0	-1
13	Corroless EPF		34	966	395	381.57	13.43	0.6	229	216
14	Corroless RF35		35	965	258	248.97	9.03	0.6	149	140
15	CTL2 Hyperlast 7980007/7855096		0	710		0	0	0.6	0	0
16	Crystic 489 Resin		470	400	0	0	0	0.6	0	0
17	Drafil Hyperlast 7850925/7855096 *		0	710		0	0	0.6	0	0
18	Dunlop NPL 100 laquer		624	336	0	0	0	0.6	0	0
20	Duralast 7859/086		151	180	0	0	0	0.6	0	0
20	Envirogard M770 Pebble		89.05	821.6	1215	998.244	108.196	0.6	599	491
21	Envoy TF500		388	287	0	0	0	0.6	0	0
22	Epidek M377		336	382	73	27.886	24.528	0.6	17	-8
23	Epigrip C425 Grey Phosphate primer		217	1121	2986	3346.87	647.962	0.6	2008	1360
24	Epigrip C425 Off White Phosphate Primer		217	1121	0	0	0	0.6	0	0
25	Epigrip H735 Buff		282.75	1017.25	0	0	0	0.6	0	0
26	Epigrip H736 White		311.148	978.852	0	0	0	0.6	0	0
27	Epigrip J784 Rich Zinc Primer		418.938	2201.062	20	44.0212	8.37876	0.6	26	18
28	Epigrip L524 Aluminium & Grey		344.52	1005.48	266	267.458	91.6423	0.6	160	69
29	Epigrip M111		416	380	0	0	0	0.6	0	0
30	Epigrip M251 Buff		405.03	974.97	75	73.1228	30.3773	0.6	44	13
31	Epigrip M253 Pebble		407.55	1022.45	115	117.582	46.8683	0.6	71	24
32	Epigrip M262		386	450	40	18	15.44	0.6	11	-5
33	Epigrip M922 Grey & Black		170.289	1419.711	909	1290.52	154.793	0.6	774	620
34	Etch Primer K179 (K570)		732.4	167.85	23.25	3.90251	17.0283	0.6	2	-15

35	Etch Primer PR30/TH43B		720	180	0	0	0	0.6	0	0
36	Expocrete UA Epoxy Filler		0	1950	0	0	0	0.6	0	0
37	FIWA Sealant		0	1253		0	0	0.6	0	0
38	Flushing oil hyperlast 4162147 *		0	0	23.5	0	0	0.6	0	0
39	Leighs C530		385	785	76	59.66	29.26	0.6	36	7
40	Hard Substrate primer Type K Hyperlast 2874016 part A 2875039 part B (MDI) *		0	1410	0	0	0	0.6	0	0
41	Intergard EAA820/821 Filler		820	730	0	0	0	0.6	0	0
43	Mac Wax		9.2	120	0	0	0	0.6	0	0
42	Leighs G280		710.7	439.3	60	26.358	42.642	0.6	16	-27
43	Metagard L574 Red Oxide		621.96	578.04	1370	791.915	852.085	0.6	475	-377
44	Leighs T75		427.284	562.716	0	0	0	0.6	0	0
45	Molykote 3402 anti-friction coating		707.4	372.6	0	0	0	0.6	0	0
46	PR148 Promoter		776	24	0	0	0	0.6	0	0
47	PR1783 Sealant Deck Plates		720	720	0	0	0	0.6	0	0
48	Release agent R801		10	910	4.2	3.822	0.042	0.6	2	2
49	Resistex M535		580	620	65	40.3	37.7	0.6	24	-14
50	Scotchcast 5136		900	100	0	0	0	0.6	0	0
51	Sigmatherm 175 (H/R alum)		391.88	618.12	25	15.453	9.797	0.6	9	-1
52	Sigmatherm 500 (HR500 H/R alum)		600.27	469.73	5	2.34865	3.00135	0.6	1	-2
53	Sikaflex 221		45.5	1254.5	137	171.867	6.2335	0.6	103	97
54	Silent Running SR 1000			1043	0	0	0	0.6	0	0
55	Soft Substrate 3M 5136 Scotchcast primer *		900	880	0	0	0	0.6	0	0
56	Spraylat E106 peelable protective coating		0	350	545	190.75	0	0.6	114	114
57	Stand off - Gap fill Hyperlast Part A 7850802 & Part B 2875046		0	0	0	0	0	0.6	0	0
58	Steridex		0	836	35	29.26	0	0.6	18	18
59	Syntactic Foam Resin (SER300, Crayamid 960Niax SC154)		0	1060		0	0	0.6	0	0

60	Trefrotex SF Bonding Coat Part A		224.5	925	0	0	0	0.6	0	0
61	Trefrotex SF Bonding Coat Part B		613	536	0	0	0	0.6	0	0
62	Trimite Ash Grey		0	1000	35	35	0	0.6	21	21
63	Trimite Q55X Air Dring Epoxy		491	519	0	0	0	0.6	0	0
64	Trimite S59 Light Admiralty Grey		0	1000	0	0	0	0.6	0	0
65	Trimite S59 Orange		0	1000	0.25	0.25	0	0.6	0	0
66	Trimite Stoving Enamel Finish S59 White		0	1000	0	0	0	0.6	0	0
67	Trimite Vellum Primer		610	495	0	0	0	0.6	0	0
68	Wessex WRA518		0	1235	2	2.47	0	0.6	1	1
69	Wessex WRA519 Primer		0	1000	220	180	0	0.6	108	108
70	Gummipaint		770	230	4.25	1.01	3.2725	0.6	1	-3
71	Epidek L716		322	678	146	98.988	47.012	0.6	59	12

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 12 month period	Mass of other solvent used (kg)
1	Amercoat No12	0.86	450	-387
2	Amercoat No65	0.87	930	-809.1
3	Acetone	0.787		0
4	Bostik 6009	0.7		0
5	Bostik M501	0.785	210	-164.85
6	International Equipment Cleaner	0.904		0
7	International thinner	0.852		0
8	Leighs No1 thinner	0.8		0
9	Leighs No3 thinner	0.9		0
10	Leighs No5 thinner	0.8	1444	-1155.2
11	Leighs No9 thinner	0.9	1993	-1793.7
12	Methyl-ethyl-ketone VWR International Ltd	0.805		0
13	Methylene chloride	1.32	34	-44.88
14	Phosphate solution	1	0.25	-0.25
15	Propan-2-ol	0.79		0
16	Steridex	1.37		0
17	T17 Thinnners	0.8		0
18	T105 Thinners	0.9		0
19	Trimite ST59	0.866	57.75	-50.0115
20	Trimite ST60			0

21	Sigma No 91-92 Thinners	0.85	160	-136
21	Corroless No6 Thinner	0.874	20	-17.48

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)	**17,412**
Total solvent used in coatings (kg)	**2,957**
Total solvent used in thinners (kg)	**4,558**
Total solvent consumption (kg)	**7,515**
Mass of solvent disposed of (kg)	**0**
Target emission (kg)	**10,447**
Actual emission (kg)	**7,515**
Difference (kg)	**2,932**

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