

## Determination of Compliance with Reduction Scheme for Adhesives 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	1.2
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Period Covered	November 1st 2010-October 31st 2011
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### ADHESIVE 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	Araldite 2011 *		0	1000	36.0	36	0	1.2	43	43
2	Araldite 2014 *		0	1000	0.0	0	0	1.2	0	0
3	Bostik 1430		742	138	70.0	9.66	51.94	1.2	12	-40
4	Bostik 2402		671	209	89.5	18.7055	60.0545	1.2	22	-38
5	Bostik C		473	457	0.0	0	0	1.2	0	0
6	Conformal bond - Versalink P1000 part A & Supresec 2021 part B (MDI)		0	1220	2302	2808.44	0	1.2	3370	3370
7	Dow Corning White 784		42	998	173.6	173.253	7.2912	1.2	208	201
8	Dow Corning Clear 784		42	998	207.7	207.285	8.7234	1.2	249	240

9	ET - 10		750	500	0	0	0	1.2	0	0
10	Foster 30-36		500	500	0	0	0	1.2	0	0
11	Gripfil		360	840	0	0	0	1.2	0	0
12	Idenden 10-188		687.5	562.5	0	0	0	1.2	0	0
13	Loctite 222		691.2	388.8	2.7	1.04976	1.86624	1.2	1	-1
14	Loctite 225		54	1026	0	0	0	1.2	0	0
15	Loctite 241		54	1026	0	0	0	1.2	0	0
16	Loctite 243		21.6	1058.4	0	0	0	1.2	0	0
17	Loctite 270		4.75	1080	18.5	19.98	0.08788	1.2	24	24
18	Loctite 406		31.5	1018.5	80.6	82.1318	2.54016	1.2	99	96
19	Loctite 415		32.7	1057.3	1.44	1.52251	0.04709	1.2	2	2
20	Loctite 454		31.5	1018.5	11.0	11.2035	0.3465	1.2	13	13
21	Loctite 495		33	1067	3.5	3.69182	0.11418	1.2	4	4
22	Loctite 496		33	1067	2.8	2.9876	0.0924	1.2	4	3
23	Loctite 542		32.4	1047.6	0.75	0.7857	0.0243	1.2	1	1
24	Loctite 572		54	1026	0.4	0.3591	0.0189	1.2	0	0
25	Loctite 574		54	1026	1.7	1.7442	0.0918	1.2	2	2
26	Loctite 601		33	1067	1	1.067	0.033	1.2	1	1
27	Loctite 2701		44	1056	2.15	2.2704	0.0946	1.2	3	3
28	Loctite 7061		760	40	350.4	14.016	266.304	1.2	17	-249
29	Sovereign PVA Adhesive		642	428	89	38.092	57.138	1.2	46	-11
30	Wessex UW44P3 Paints		0	2000	0	0	0	1.2	0	0
31	Wessex WRA4501 Adhesive		0	1580	0	0	0	1.2	0	0
32	Wessex WRA4601 Adhesive		0	1000	528	528	0	1.2	634	634
33	Devcon Aluminium Putty		0	1000	0	0	0	1.2	0	0

**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	Bostik 6009 cleaner	0.7		0
2	Bostik M501	0.88	291	-256.08
3	Desolvit FD1000	0.78	164	-127.92
4	Liquid neutraliser (in-house Chemist Lab)	0.99		0

#### 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	Solvent in collected waste			0

#### SUMMARY OF COMPLIANCE WITH THE REDUCTION SCHEME

Total solids used (kg)	3,962
Total solvent used in adhesives (kg)	457
Total solvent used in cleaners (kg)	384
Total solvent consumption (kg)	841
Mass of solvent disposed of (kg)	0
Target emission (kg)	4,755
Actual emission (kg)	841
Difference (kg)	3,914

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