

Determination of Compliance with Reduction Scheme for Adhesives Materials

BAE SYSTEMS MARITIME - 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

Period Covered Nov 16 - Oct 17

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 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	24.0	24	0	1.2	29	29
2	Bostik 2402		671	209	4.0	0.836	2.684	1.2	1	-2
3	Bostik 9252		700	300	34.0	10.2	23.8	1.2	12	-12
4	Dow Corning White 784		42	998	191.6	191.197	8.04636	1.2	229	221
5	Dow Corning Clear 784		42	998	102.3	102.095	4.2966	1.2	123	118

6	Loctite 222		691.2	388.8	3.7	1.43856	2.55744	1.2	2	-1
7	Loctite 241		54	1026	0.2	0.2052	0.0108	1.2	0	0
8	Loctite 270		4.75	1080	19.0	20.52	0.09025	1.2	25	25
9	Loctite 406		31.5	1018.5	11.4	11.6109	0.3591	1.2	14	14
10	Loctite 415		32.7	1057.3	1.8	1.88199	0.05821	1.2	2	2
11	Loctite 454		31.5	1018.5	12.2	12.4664	0.38556	1.2	15	15
12	Loctite 495		33	1067	5.3	5.67644	0.17556	1.2	7	7
13	Loctite 496		33	1067	3.2	3.43574	0.10626	1.2	4	4
14	Loctite 542		32.4	1047.6	0.5	0.47142	0.01458	1.2	1	1
15	Loctite 574		54	1026	0.2	0.2052	0.0108	1.2	0	0
16	Loctite 2701		44	1056	3.7	3.9072	0.1628	1.2	5	5
17	Loctite 7061 - Use Solvents in Cleaning below		760	40	377.6	15.104	286.976	1.2	18	-269
18	Sovereign PVA Adhesive		642	428	70.0	29.96	44.94	1.2	36	-9
19	Wessex UW44P3		0	2000	6.5	13	0	1.2	16	16
20	Wessex WRA4601 Adhesive		0	1000	413.0	413	0	1.2	496	496

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	Bostik 6009 cleaner	0.7		0
2	Bostik M501	0.88	168	-147.84
3	Desolvit FD1000	0.78	144	-112.32
4	Liquid neutraliser (in-house Chemist Lab)	0.99		0
5	-			0
6	Loctite 7061	0.8		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)	861.2
Total solvent used in adhesives (kg)	374.7
Total solvent used in cleaners (kg)	260.2
Total solvent consumption (kg)	634.8
Mass of solvent disposed of (kg)	0.0
Target emission (kg)	1,033.5
Actual emission (kg)	634.8
Difference (kg)	398.6

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