

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 Nov 13 - Oct 14

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 | 566 | 382.616 | 3.396 | 0.6 | 230 | 226 |
| 2 | Sigmacover 400 | | 163 | 1190 | 8881 | 10568.4 | 1447.6 | 0.6 | 6341 | 4893 |
| 3 | Ameron 71 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 4 | Ambersil Release | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 5 | Belzona 111/1121 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 6 | Belzona 2121 Elastomer | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 7 | Biogard M630 Pebble | | 2 | 696.8 | 521.24 | 363.2 | 1.04248 | 0.6 | 218 | 217 |
| 8 | Bostik 9252 Primer | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 9 | CANTL Hyperlast 2851245/2875044 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 10 | Chromate primer PR143 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 11 | Cilcoat S260 Laquer | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 12 | Cilrelease 400 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 13 | Corroless EPF | | 0 | 1484.1 | 424 | 629.258 | 0 | 0.6 | 378 | 378 |

| | | | | | | | | | | |
|----|-------------------------------------|--|-------|--------|--------|---------|---------|-----|------|------|
| 14 | Corroless RF35 | | 0 | 1248 | 124 | 154.752 | 0 | 0.6 | 93 | 93 |
| 15 | Crystic 489 Resin | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 16 | Duralast 7859/086 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 17 | Envirogard M770 Pebble | | 129 | 456.3 | 826 | 376.904 | 106.554 | 0.6 | 226 | 120 |
| 18 | Envoy TF500 | | 388 | 1449 | 157 | 227.493 | 60.916 | 0.6 | 136 | 76 |
| 19 | Epidek M377 | | 985.8 | 382 | 101.2 | 38.6584 | 99.763 | 0.6 | 23 | -77 |
| 20 | Epigrip C425 | | 249 | 1155 | 3080 | 3557.4 | 766.92 | 0.6 | 2134 | 1368 |
| 21 | Epigrip H735 Buff | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 22 | Epigrip H736 White | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 23 | Epigrip J984 Rich Zinc Primer | | 399 | 1624.4 | 122.08 | 198.307 | 48.7099 | 0.6 | 119 | 70 |
| 24 | Epigrip L524 | | 344 | 864 | 555 | 479.52 | 190.92 | 0.6 | 288 | 97 |
| 25 | Epigrip M111 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 26 | Epigrip M251 Buff | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 27 | Epigrip M922M | | 179 | 1245 | 216 | 268.92 | 38.664 | 0.6 | 161 | 123 |
| 28 | Epigrip M262 | | 846 | 450 | 20 | 9 | 16.92 | 0.6 | 5 | -12 |
| 29 | Epigrip M922 | | 167 | 1319.7 | 1082 | 1427.92 | 180.694 | 0.6 | 857 | 676 |
| 30 | Leighs C530 | | 385 | 785 | 260 | 204.1 | 100.1 | 0.6 | 122 | 22 |
| 31 | Epigrip M671 | | 391 | 826.8 | 15 | 12.402 | 5.865 | 0.6 | 7 | 2 |
| 32 | Mac Wax | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 33 | Leighs G280 | | 643 | 310.5 | 415 | 128.858 | 266.845 | 0.6 | 77 | -190 |
| 34 | Metagard L574 Red Oxide | | 621 | 578.04 | 1096 | 633.532 | 680.616 | 0.6 | 380 | -300 |
| 35 | Leighs T75 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 36 | Molykote 3402 anti-friction coating | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 37 | PR148 Promoter | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 38 | PR1783 Sealant Deck Plates | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 39 | Release agent R801 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 40 | Resistex M535 | | 572 | 423.5 | 365 | 154.578 | 208.78 | 0.6 | 93 | -116 |
| 41 | Resistex M237 | | 443 | 756 | 20 | 15.12 | 8.86 | 0.6 | 9 | 0 |
| 42 | Sigmatherm 175 (H/R alum) | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 43 | Sigmatherm 500 (HR500 H/R alum) | | | | | 0 | 0 | 0.6 | 0 | 0 |

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|----|---|-----|--------|------|---------|---------|-----|-----|-----|---|
| 44 | Sikaflex 221 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 45 | Silent Running SR 1000 | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 46 | Soft Substrate 3M 5136 Scotchcast primer * | | | | | 0 | 0 | 0.6 | 0 | 0 |
| 47 | Spraylat E106 peelable protective coating | 0 | 348.8 | 550 | 191.84 | 0 | 0.6 | 115 | 115 | |
| 48 | Sikagard 203-w (Steridex) | 0 | 630.45 | 15 | 9.45675 | 0 | 0.6 | 6 | 6 | |
| 49 | Syntactic Foam Resin (SER300, Crayamid 960Niax SC154) | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 50 | Trefrotex SF Bonding Coat Part A | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 51 | Trefrotex SF Bonding Coat Part B | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 52 | Trimite P8000 (Powder Coating) | 0 | 1600 | 951 | 1521.6 | 0 | 0.6 | 913 | 913 | |
| 53 | Trimite Q55X | 458 | 550 | 253 | 139.15 | 115.874 | 0.6 | 83 | -32 | |
| 54 | Trimite Q50 | 420 | 550 | 20 | 11 | 8.4 | 0.6 | 7 | -2 | |
| 55 | Trimite S59 | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 56 | Trimite Stoving Enamel Finish S59 White | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 57 | Trimite Vellum Primer | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 58 | Wessex WRA518 | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 59 | Wessex WRA519 Primer | | | | 0 | 0 | 0.6 | 0 | 0 | |
| 60 | Intertherm 50 | 509 | 508.5 | 100 | 50.85 | 50.9 | 0.6 | 31 | -20 | |
| 61 | Epidek L716 | 420 | 683.4 | 101 | 69.0234 | 42.42 | 0.6 | 41 | -1 | |
| 62 | Interguard 269 | 293 | 719.1 | 270 | 194.157 | 79.11 | | 0 | -79 | |
| 63 | Interline 850 | 143 | 1193.2 | 390 | 465.348 | 55.77 | | 0 | -56 | |
| 64 | Epigrip H795 | 575 | 482.6 | 41.5 | 20.0279 | 23.8625 | | 0 | -24 | |

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 | GTA 220 | 0.85 | 85 | -72.25 |
| 2 | Leighs No.5 | 0.89 | 1680 | -1495.2 |
| 3 | Leighs No.9 | 0.84 | 1779 | -1494.36 |
| 4 | Corroless No.4 | 0.86 | 43 | -36.98 |
| 5 | Corroless No.6 | 0.86 | 175 | -150.5 |
| 6 | Thinner 90-58 | 0.85 | 364 | -309.4 |
| 7 | Thinner 91-92 | 0.85 | 2111 | -1794.35 |
| 8 | | | | 0 |
| 9 | | | | 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 | Collected waste (assumed 3% paint, of which half solvent) | | | 0 |
| | | | | |
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SUMMARY OF COMPLIANCE WITH THE REDUCTION SCHEME

| | |
|-------------------------------------|--------|
| Total solids used (kg) | 22,503 |
| Total solvent used in coatings (kg) | 4,610 |
| Total solvent used in thinners (kg) | 5,353 |
| Total solvent consumption (kg) | 9,963 |
| Mass of solvent disposed of (kg) | 0 |
| Target emission (kg) | 13,094 |
| Actual emission (kg) | 9,963 |
| Difference (kg) | 3,132 |

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