## Audit - EU DK MAL Code

### SIGMADUR 540 BASE BASE Z

## **Denmark MAL Code**

#### Audit - MAL Code

U Denmark MAL Code:- 4-3 The MAL Code calculations are performed with product and component data. Product is a Liquid SIGMADUR 540 BASE BASE Z - Components considered for the MAL Code calculation. {Denmark MAL Code} BARIUM SULFATE (20.7921%) CAS: 7727-43-7 Density: 4.5 Molecular Weight: 233.4 Boiling Point: 1599.85 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 20792.1 acrylic resin (17.8926%) CAS: SUB139279 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 17892.6 N-BUTYL ACETATE (11.2633663%) Organic Solvent. CAS: 123-86-4 Density: 0.881 Relative Density: 0.88 Molecular Weight: 116.18 Boiling Point: 126 Vapour Pressure: 11.25096 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 14. Limit: 0 FAD entered: 1; Lower Limit: 0 FAD 1 Quotient = 11263.366 XYLENES (8.5141829%) Organic Solvent. CAS: 1330-20-7 Density: 0.86 Relative Density: 0.861 Molecular Weight: 106.17 Boiling Point: 136.16

Vapour Pressure: 6.7 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 46. Limit: 0 FAD entered: 1: Lower Limit: 0.2 FAD 3 Quotient = 0.851 FAD 1 Quotient = 42.571 acrylic resin (8.32257%) CAS: SUB110668 Density: 1.1 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 8322.57 polyacrylate resin (5.4%) CAS: SUB110590 Density: 1.1 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 5400 Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate (4.9875%) CAS: SUB135541 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 4987.5 Solvent naphtha (petroleum), light arom. (4.87%) CAS: 64742-95-6 Density: 0.875 Boiling Point: 167.5 Vapour Pressure: 5.66 No LBL Factor entered or estimated from CAS Number or Boiling Point. R Phrases: R10 N:R51/53 MAL Factor from Sub-Annex 2: 50 FAD: 1. (Default) FAD 1 Quotient = 4870 ISOBUTYL ALCOHOL (4.1949%) Organic Solvent. CAS: 78-83-1 Density: 0.802 Relative Density: 0.8 Molecular Weight: 74.14 Boiling Point: 108 Vapour Pressure: 10.800918 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 67. Limit: 0 FAD entered: 1; Lower Limit: 0

FAD 1 Quotient = 4194.9 POLYETHER POLYOL (3%) CAS: 9082-00-2 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 3000 ETHYLBENZENE (2.205026%) Organic Solvent. Carcinogen. CAS: 100-41-4 Density: 0.866 Relative Density: 0.9 Molecular Weight: 106.18 Boiling Point: 136.1 Vapour Pressure: 9.30076 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 46. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.2211-METHOXY-2-PROPYL ACETATE (1.84001%) Organic Solvent. CAS: 108-65-6 Density: 0.962 Relative Density: 0.96 Molecular Weight: 132.18 Boiling Point: 145.8 Vapour Pressure: 2.7 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 19. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 1840.01 Hydrocarbons, C9, aromatics (1.728%) CAS: 64742-95-6 Density: 0.879 Molecular Weight: 123 Boiling Point: 172.5 Vapour Pressure: 1.5 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 58. Limit: 0 FAD entered: 1; Lower Limit: 0.1 FAD 1 Quotient = 17.28 ZINC ORTHOPHOSPHATE (0.98%) CAS: 7779-90-0 Density: 3.26 Molecular Weight: 386.05 No LBL Factor entered or estimated from CAS Number or Boiling Point.

MAL Factor entered: 0. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 9802,6-DIMETHYLHEPTANONE (0.65107%) Organic Solvent. CAS: 108-83-8 Density: 0.81 Relative Density: 0.805 Molecular Weight: 142.27 Boiling Point: 168.26 Vapour Pressure: 1.72514 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 47. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 651.07 Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (0.6%) CAS: 1065336-91-5 Density: 0.992 Molecular Weight: 878.31 Boiling Point: 330 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 600 Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine (0.56%) CAS: 911674-82-3 Density: 1.02 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor from OEL: 0 R Phrases: R43 R53 FAD: 1. (Default) FAD 1 Quotient = 560 1,3,5-TRIMETHYLBENZENE (0.4917%) Organic Solvent. CAS: 108-67-8 Density: 0.86 Relative Density: 0.86 Molecular Weight: 120.19 Boiling Point: 164.74 Vapour Pressure: 2.4002 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 58. Limit: 0 FAD entered: 1; Lower Limit: 0 FAD 1 Quotient = 491.7 N-BUTYL ACRYLATE (0.320143%) Organic Solvent. CAS: 141-32-2 Density: 0.9

Relative Density: 0.9 Molecular Weight: 128.19 Boiling Point: 147 Vapour Pressure: 3.75032 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 180. Limit: 0 FAD entered: 3: Lower Limit: 0.1 FAD 5 Quotient = 0.320 FAD 3 Quotient = 3.201 Hexanoic acid, 2-ethyl-, zinc salt, basic (0.31243%) CAS: 85203-81-2 Density: 1.5 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 312.43 POLYAMIDE WAX (0.24%) CAS: SUB101889 Density: 1.1 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1; Lower Limit: 0.1 FAD 1 Quotient = 2.4 QUARTZ (<10 microns) (0.2079%) Carcinogen. CAS: 14808-60-7 Density: 0 Relative Density: 2.6 Molecular Weight: 60.09 Boiling Point: 2230 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 6 Quotient = 0.021FAD 3 Quotient = 0.208 BLOCKED COPOLYMER (0.18%) CAS: SUB100054 Density: 1 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1: Lower Limit: 0.1 FAD 1 Quotient = 1.8 TOLUENE (0.1458167%) Organic Solvent. CAS: 108-88-3 Density: 0.87 Relative Density: 0.87 Molecular Weight: 92.14

Boiling Point: 110.6 Vapour Pressure: 23.17 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 74. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.015 NAPHTHA (PETROLEUM); HYDROTREATED HEAVY (0.072%) CAS: 64742-48-9 Density: 0.775 Molecular Weight: 143 Boiling Point: 186 Vapour Pressure: 1.50012 No LBL Factor entered or estimated from CAS Number or Boiling Point. R Phrases: R10 Xn:R65 R66 MAL Factor from Sub-Annex 2: 1000 FAD: 1. (Default) FAD 1 Quotient = 72 METHYL METHACRYLATE (0.0627%) Organic Solvent. CAS: 80-62-6 Density: 0.94 Relative Density: 0.94 Molecular Weight: 100.13 Boiling Point: 100.36 Vapour Pressure: 27,75236 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 46. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 5 Quotient = 0.013 FAD 3 Quotient = 0.063Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics (0.03493%) CAS: 64742-48-9 Density: 0.76 Boiling Point: 151.5 Vapour Pressure: 3.75 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 12. Limit: 0 FAD entered: 1; Lower Limit: 0 FAD 1 Quotient = 34.93 ALKOXYLATED BUTYL ETHER (0.02970781%) CAS: 9038-95-3 Density: 1 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.015ZINC OXIDE (0.02%) CAS: 1314-13-2

Density: 5.68 Relative Density: 5.61 Molecular Weight: 81.37 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 20SILICONE CONTAINING ADDITIVE (0.014%) CAS: SUB119851 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 14 proprietary siloxane (0.01382%) CAS: SUB127499 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 13.82 1-BUTANOL (0.01215%) Organic Solvent. CAS: 71-36-3 Density: 0.81 Relative Density: 0.81 Molecular Weight: 74.14 Boiling Point: 119 Vapour Pressure: 6.750576 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 67. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 12.15METHYL ALCOHOL (0.0100008%) Organic Solvent. CAS: 67-56-1 Density: 0.792 Relative Density: 0.79 Molecular Weight: 32.05 Boiling Point: 64.7 Vapour Pressure: 126.96329 LBLFactor = 100 (BP=64.7) MAL Factor entered: 54. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 6 Quotient = 0.001 FAD 3 Quotient = 0.010proprietary polyglycol (0.00839%) CAS: SUB127500

Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 8.39 BENZENE (0.007233%) Organic Solvent. Carcinogen. CAS: 71-43-2 Density: 0.877 Relative Density: 0.88 Molecular Weight: 78.12 Boiling Point: 80.09 Vapour Pressure: 75.00609 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 880. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 6 Quotient = 0.0722-METHOXY-1-PROPYL ACETATE (0.005616%) Organic Solvent. CAS: 70657-70-4 Density: 0.97 Molecular Weight: 132.18 Boiling Point: 150.5 Vapour Pressure: 2.9 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 181. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 6 Quotient = 0.028 WATER (0.00502%) CAS: 7732-18-5 Density: 1 Molecular Weight: 18.02 Boiling Point: 100 Vapour Pressure: 17.5 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 0; Lower Limit: 0 PROPYLENE GLYCOL MONOMETHYL ETHER (0.0036%) Organic Solvent. CAS: 107-98-2 Density: 0.92 Relative Density: 0.92 Molecular Weight: 90.14 Boiling Point: 120.17 Vapour Pressure: 8.5 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 28. Limit: 0

FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 3.6 ACETIC ACID (0.000675%) Organic Solvent. CAS: 64-19-7 Density: 1.04 Relative Density: 1.05 Molecular Weight: 60.06 Boiling Point: 117.9 Vapour Pressure: 15.59383 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 1. Limit: FAD entered: 1: Lower Limit: No limit specified. A very low value will be used. FAD 4 Quotient = 0.000 organotin compound (0.000396%) CAS: SUB143296 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor from OEL: 0 R Phrases: None FAD: 1. (Default) FAD 1 Quotient = 0.396OCTAMETHYLCYCLOTETRASILOXANE (0.00018%) CAS: 556-67-2 Density: 0.95 Relative Density: 0.96 Molecular Weight: 296.68 Boiling Point: 175 Vapour Pressure: 0.99008 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 1. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.000 Decamethylcyclopentasiloxane (0.00018%) CAS: 541-02-6 Density: 0.96 Molecular Weight: 370.85 Boiling Point: 210 Vapour Pressure: 0.25 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 0. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 1 Quotient = 0.002CUMENE (0.0000849%) Organic Solvent. CAS: 98-82-8 Density: 0.86 Relative Density: 0.9

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Molecular Weight: 120.21
  Boiling Point: 152
  Vapour Pressure: 3.72032
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
  MAL Factor entered: 1. Limit: 0
 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
  FAD 3 Quotient = 0.000
PROPYLENE OXIDE (0.00000149%)
  Organic Solvent.
 Carcinogen.
  CAS: 75-56-9
 Density: 0.83
  Relative Density: 0.8
  Molecular Weight: 58.09
 Boiling Point: 34.23
 Vapour Pressure: 538
 LBLFactor = 100 (BP=34.23)
  MAL Factor entered: 1. Limit: 0
 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
  FAD 6 Quotient = 0.000
ACETALDEHYDE (0.00000019%)
 Organic Solvent.
  Carcinogen.
  CAS: 75-07-0
  Density: 0
  Relative Density: 0.78
 Molecular Weight: 44.06
 Boiling Point: 20.1
  Vapour Pressure: 900.07313
 LBLFactor = 100 (BP=20.1)
  MAL Factor entered: 1. Limit: 0
  FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
  FAD 3 Quotient = 0.000
HYDROCHLORIC ACID (0.00000019%)
  CAS: 7647-01-0
  Density: 0.86
  Boiling Point: 109.85
  No LBL Factor entered or estimated from CAS Number or Boiling Point.
 MAL Factor entered: 2900. Limit: 0
 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
  FAD 4 Quotient = 0.000
  FAD 3 Quotient = 0.000
FORMALDEHYDE (0.00000014%)
  Carcinogen.
  CAS: 50-00-0
  Density: 1.09
 Relative Density: 0.812
 Molecular Weight: 30.03
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Boiling Point: 98
    Vapour Pressure: 1
    No LBL Factor entered or estimated from CAS Number or Boiling Point.
    MAL Factor entered: 2500. Limit: 0
    FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
    FAD 6 Quotient = 0.000
    FAD 3 Quotient = 0.000
  ETHYLENE OXIDE (0.00000014%)
    Carcinogen.
    CAS: 75-21-8
    Density: 0.882
    Relative Density: 0.9
    Molecular Weight: 44.06
    Boiling Point: 10.7
    Vapour Pressure: 1314.1117
    LBLFactor = 100 (BP=10.7)
    MAL Factor entered: 11. Limit: 0
    FAD entered: 1: Lower Limit: No limit specified. A very low value will be used.
    FAD 6 Quotient = 0.000
  1,4-DIOXANE (0.0000008%)
    Organic Solvent.
    Carcinogen.
    CAS: 123-91-1
    Density: 1.03
    Relative Density: 1.03
    Molecular Weight: 88.12
    Boiling Point: 101.15
    Vapour Pressure: 30.7525
    No LBL Factor entered or estimated from CAS Number or Boiling Point.
    MAL Factor entered: 390. Limit: 0
    FAD entered: 1; Lower Limit: No limit specified. A very low value will be used.
    FAD 6 Quotient = 0.000
    FAD 3 Quotient = 0.000
  METHYL CHLORIDE (0.0000008%)
    Carcinogen.
    CAS: 74-87-3
    Density: 0.911
    Relative Density: 0.92
    Molecular Weight: 50.49
    Boiling Point: -23.7
    Vapour Pressure: 3671.9
    LBLFactor = 100 (BP=-23.7)
    MAL Factor from OEL: 476.19 ** Warning: An Evaporation Rate Correction Factor of 2 was used. Contact the Authorities for a MAL Factor.
    R Phrases: F+;R12 Xn;R48/20 Carc.Cat.3;R40
    FAD: 1. (Default)
    FAD 1 Quotient = 0.000
Density = 1.181. Entered value.
Figure-before-the dash = 4
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BARIUM SULFATE(@20.79%). MAL Factor = 0. Total increased by 20.79\*0=0. Running Total = 0 N-BUTYL ACETATE(@11.26%), MAL Factor = 14. Total increased by 11.26\*14=157.69, Running Total = 157.69 XYLENES(@8.51%), MAL Factor = 46. Total increased by 8.51\*46=391.65. Running Total = 549.34 Solvent naphtha (petroleum), light arom.(@4.87%). MAL Factor = 50. Total increased by 4.87\*50=243.50. Running Total = 792.84 ISOBUTYL ALCOHOL(@4.19%). MAL Factor = 67. Total increased by 4.19\*67=281.06. Running Total = 1073.90 ETHYLBENZENE(@2.21%). MAL Factor = 46. Total increased by 2.21\*46=101.43. Running Total = 1175.33 1-METHOXY-2-PROPYL ACETATE(@1.84%). MAL Factor = 19. Total increased by 1.84\*19=34.96. Running Total = 1210.29 Hydrocarbons, C9, aromatics (@1.73%), MAL Factor = 58, Total increased by 1.73\*58=100.22, Running Total = 1310.51 ZINC ORTHOPHOSPHATE(@0.98%). MAL Factor = 0. Total increased by 0.98\*0=0. Running Total = 1310.51 2,6-DIMETHYLHEPTANONE(@0.65%). MAL Factor = 47. Total increased by 0.65\*47=30.60. Running Total = 1341.11 Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine(@0.56%). MAL Factor = 0. Total increased by 0.56\*0=0.00. Running Total = 1341.11 1,3,5-TRIMETHYLBENZENE(@0.49%). MAL Factor = 58. Total increased by 0.49\*58=28.52. Running Total = 1369.63 N-BUTYL ACRYLATE(@0.32%). MAL Factor = 180. Total increased by 0.32\*180=57.63. Running Total = 1427.26 Hexanoic acid, 2-ethyl-, zinc salt, basic(@0.31%). MAL Factor = 0. Total increased by 0.31\*0=0. Running Total = 1427.26 POLYAMIDE WAX(@0.24%). MAL Factor = 0. Total increased by 0.24\*0=0. Running Total = 1427.26 QUARTZ (<10 microns)(@0.21%). MAL Factor = 0. Total increased by 0.21\*0=0. Running Total = 1427.26 BLOCKED COPOLYMER(@0.18%). MAL Factor = 0. Total increased by 0.18\*0=0. Running Total = 1427.26 TOLUENE(@0.15%). MAL Factor = 74. Total increased by 0.15\*74=10.79. Running Total = 1438.05 NAPHTHA (PETROLEUM); HYDROTREATED HEAVY(@0.07%). MAL Factor = 1000. Total increased by 0.07\*1000=72.00. Running Total = 1510.05 METHYL METHACRYLATE(@0.06%). MAL Factor = 46. Total increased by 0.06\*46=2.88. Running Total = 1512.93 Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics(@0.03%). MAL Factor = 12. Total increased by 0.03\*12=0.42. Running Total = 1513.35 ALKOXYLATED BUTYL ETHER(@0.03%). MAL Factor = 0. Total increased by 0.03\*0=0. Running Total = 1513.35 ZINC OXIDE(@0.02%). MAL Factor = 0. Total increased by 0.02\*0=0. Running Total = 1513.35 1-BUTANOL(@0.01%). MAL Factor = 67. Total increased by 0.01\*67=0.81. Running Total = 1514.17 METHYL ALCOHOL(@0.01%). MAL Factor = 54. Total increased by 0.01\*54=0.54. Running Total = 1514.71 BENZENE(@0.01%). MAL Factor = 880. Total increased by 0.01\*880=6.37. Running Total = 1521.07 2-METHOXY-1-PROPYL ACETATE(@0.01%). MAL Factor = 181. Total increased by 0.01\*181=1.02. Running Total = 1522.09 WATER(@0.01%), MAL Factor = 0. Total increased by 0.01\*0=0. Running Total = 1522.09 PROPYLENE GLYCOL MONOMETHYL ETHER(@0.00%). MAL Factor = 28. Total increased by 0.00\*28=0.10. Running Total = 1522.19 ACETIC ACID(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1522.19 organotin compound (@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0.00. Running Total = 1522.19 OCTAMETHYLCYCLOTETRASILOXANE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1522.19 Decamethylcvclopentasiloxane(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0. Running Total = 1522.19 CUMENE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1522.19 PROPYLENE OXIDE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1522.19 ACETALDEHYDE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1522.19 HYDROCHLORIC ACID(@0.00%). MAL Factor = 2900. Total increased by 0.00\*2900=0.00. Running Total = 1522.19 FORMALDEHYDE(@0.00%). MAL Factor = 2500. Total increased by 0.00\*2500=0.00. Running Total = 1522.19 ETHYLENE OXIDE(@0.00%). MAL Factor = 11. Total increased by 0.00\*11=0.00. Running Total = 1522.19 1,4-DIOXANE(@0.00%). MAL Factor = 390. Total increased by 0.00\*390=0.00. Running Total = 1522.19 METHYL CHLORIDE(@0.00%). MAL Factor = 476.19. Total increased by 0.00\*476.19=0.00. Running Total = 1522.19 Figure-before-the-dash calculated as 4. Via MAL Factor Total \* Density (1522.19 \* 1.181) giving a MAL Number of 1798 MAL Number = Density (1.181) \* Sum (1522.19) = 1798 Figure-after-the-dash = 3. Calculated from component data. BARIUM SULFATE (@20.79%) Increasing Total for FAD1 by 20792.1, giving 20792.1 acrylic resin (@17.89%) Increasing Total for FAD1 by 17892.6, giving 38684.7 N-BUTYL ACETATE (@11.26%) Increasing Total for FAD1 by 11263.3663, giving 49948.0663

XYLENES (@8.51%) Increasing Total for FAD1 by 42.5709145, giving 49990.6372145 acrylic resin (@8.32%) Increasing Total for FAD1 by 8322.57, giving 58313.2072145 polyacrylate resin (@5.4%) Increasing Total for FAD1 by 5400, giving 63713.2072145 Reaction mass of dimethyl adipate and dimethyl glutarate and dimethyl succinate (@4.99%) Increasing Total for FAD1 by 4987.5, giving 68700.7072145 Solvent naphtha (petroleum), light arom. (@4.87%) Increasing Total for FAD1 by 4870, giving 73570.7072145 ISOBUTYL ALCOHOL (@4.19%) Increasing Total for FAD1 by 4194.9, giving 77765.6072145 POLYETHER POLYOL (@3%) Increasing Total for FAD1 by 3000, giving 80765.6072145 ETHYLBENZENE (@2.21%) Increasing Total for FAD3 by 0.2205026, giving 1.07192089 1-METHOXY-2-PROPYL ACETATE (@1.84%) Increasing Total for FAD1 by 1840.01, giving 82605.6172145 Hydrocarbons, C9, aromatics (@1.73%) Increasing Total for FAD1 by 17.28, giving 82622.8972145 ZINC ORTHOPHOSPHATE (@0.98%) Increasing Total for FAD1 by 980, giving 83602.8972145 2.6-DIMETHYLHEPTANONE (@0.65%) Increasing Total for FAD1 by 651.07, giving 84253.9672145 Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (@0.6%) Increasing Total for FAD1 by 600, giving 84853.9672145 Reaction products of 12-hydroxyoctadecanoic acid and octadecanoic acid and 1,3-phenylenedimethanamine (@0.56%) Increasing Total for FAD1 by 560, giving 85413.9672145 1.3.5-TRIMETHYLBENZENE (@0.49%) Increasing Total for FAD1 by 491.7. giving 85905.6672145 N-BUTYL ACRYLATE (@0.320143%) Increasing Total for FAD5 by 0.320143, giving 0.320143 N-BUTYL ACRYLATE (@0.32%) Increasing Total for FAD3 by 3.20143, giving 4.27335089 Hexanoic acid, 2-ethyl-, zinc salt, basic (@0.31%) Increasing Total for FAD1 by 312.43, giving 86218.0972145 POLYAMIDE WAX (@0.24%) Increasing Total for FAD1 by 2.4, giving 86220.4972145 QUARTZ (<10 microns) (@0.21%) Increasing Total for FAD6 by 0.02079, giving 0.02079 QUARTZ (<10 microns) (@0.21%) Increasing Total for FAD3 by 0.2079, giving 4.48125089 BLOCKED COPOLYMER (@0.18%) Increasing Total for FAD1 by 1.8, giving 86222.2972145 TOLUENE (@0.15%) Increasing Total for FAD3 by 0.01458167, giving 4.49583256 NAPHTHA (PETROLEUM); HYDROTREATED HEAVY (@0.07%) Increasing Total for FAD1 by 72, giving 86294.2972145 METHYL METHACRYLATE (@0.0627%) Increasing Total for FAD5 by 0.01254, giving 0.332683 METHYL METHACRYLATE (@0.06%) Increasing Total for FAD3 by 0.0627, giving 4.55853256 Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics (@0.03%) Increasing Total for FAD1 by 34.93, giving 86329.2272145 ALKOXYLATED BUTYL ETHER (@0.03%) Increasing Total for FAD3 by 0.014853905, giving 4.573386465 ZINC OXIDE (@0.02%) Increasing Total for FAD1 by 20, giving 86349.2272145 SILICONE CONTAINING ADDITIVE (@0.01%) Increasing Total for FAD1 by 14, giving 86363.2272145 proprietary siloxane (@0.01%) Increasing Total for FAD1 by 13.82, giving 86377.0472145 1-BUTANOL (@0.01%) Increasing Total for FAD1 by 12.15, giving 86389.1972145 METHYL ALCOHOL (@0.01%) Increasing Total for FAD6 by 0.000500004, giving 0.021290004 METHYL ALCOHOL (@0.01%) Increasing Total for FAD3 by 0.01000008, giving 4.583386545 proprietary polyglycol (@0.01%) Increasing Total for FAD1 by 8.39, giving 86397.5872145 BENZENE (@0.01%) Increasing Total for FAD6 by 0.07233, giving 0.093620004 2-METHOXY-1-PROPYL ACETATE (@0.01%) Increasing Total for FAD6 by 0.02808, giving 0.121700004 PROPYLENE GLYCOL MONOMETHYL ETHER (@0.00%) Increasing Total for FAD1 by 3.6, giving 86401.1872145 ACETIC ACID (@0.00%) Increasing Total for FAD4 by 0.000027, giving 0.000027 organotin compound (@0.00%) Increasing Total for FAD1 by 0.396, giving 86401.5832145 OCTAMETHYLCYCLOTETRASILOXANE (@0.00%) Increasing Total for FAD3 by 0.00018, giving 4.583566545 Decamethylcyclopentasiloxane (@0.00%) Increasing Total for FAD1 by 0.0018, giving 86401.5850145 CUMENE (@0.00%) Increasing Total for FAD3 by 0.0000849, giving 4.583651445 PROPYLENE OXIDE (@0.00%) Increasing Total for FAD6 by 0.00000745, giving 0.121707454 ACETALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.0000019, giving 4.583653345

XYLENES (@8.51%) Increasing Total for FAD3 by 0.85141829, giving 0.85141829

HYDROCHLORIC ACID (@0.00%) Increasing Total for FAD4 by 0.00000038, giving 0.000027038 HYDROCHLORIC ACID (@0.00%) Increasing Total for FAD3 by 0.000000475, giving 4.583653820 FORMALDEHYDE (@0.00%) Increasing Total for FAD6 by 0.0000014, giving 0.121707594 FORMALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.0000014, giving 4.583655220 ETHYLENE OXIDE (@0.00%) Increasing Total for FAD6 by 0.0000007, giving 0.121708294 1,4-DIOXANE (@0.00%) Increasing Total for FAD6 by 0.0000008, giving 0.121708302 1,4-DIOXANE (@0.00%) Increasing Total for FAD3 by 0.0000008, giving 4.583656020 METHYL CHLORIDE (@0.00%) Increasing Total for FAD1 by 0.00008, giving 86401.5850945 Figure-after-the-dash =3. Total of components with FAD=3 is >=1.

#### Low Boiling Liquid = False.

METHYL ALCOHOL (@0.01%) Total increased by 0.01\*54/100=0.01. Running Total = 0.01 PROPYLENE OXIDE (@0.00%) Total increased by 0.00\*1/100=0.00. Running Total = 0.01 ACETALDEHYDE (@0.00%) Total increased by 0.00\*1/100=0.00. Running Total = 0.01 ETHYLENE OXIDE (@0.00%) Total increased by 0.00\*11/100=0.00. Running Total = 0.01 METHYL CHLORIDE (@0.00%) Total increased by 0.00\*476.19/100=0.00. Running Total = 0.01 Density \* (Sum of components Concentration \* MALFactor/LBLFactor) = 0.01 Recommended Usage Temperature is < 40C, hence no MAL Code in use is assigned.

#### Audit - RFU MAL Code

EU Denmark RFU MAL Code:-Nothing was found

#### **New Fields for IA3.3**

MAL-code	
MAL Number	
MAL Number (RFU)	

Protection based on MAL

1	4-3
:	<b>17</b> 97.71
÷	Not applicable.

# : According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:

**General:** Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.

In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

#### MAL-code: 4-3

**Application:** When spraying in new\* booths if the operator is outside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.

- Air-supplied half mask and eye protection must be worn.

When using scraper or knife, brush, roller, etc. for pre- and post-treatments in

cabins or booths of the existing\* facility type, if the operator is inside the spray zone.

- Air-supplied half mask, coveralls and eye protection must be worn.

During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents.

- Air-supplied full mask and coveralls must be worn.

When spraying in existing\* spray booths, if the operator is outside the spray zone.

- Air-supplied full mask, arm protectors and apron must be worn.

During non-atomizing spraying in existing\* facilities of the combined-cabin, spraycabin and spray-booth type where the operator is working inside the spray zone.

- Air-supplied full mask must be worn.

During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.

- Air-supplied full mask, coveralls and hood must be worn.

**Drying:** Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.

**Polishing:** When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.

Caution The regulations contain other stipulations in addition to the above.

\*See Regulations.

: Not available.

Not available. Not available.

Protection based on R-F-U MAL