## **Audit - EU DK MAL Code**

## **PPG AQUACOVER 40 (TINTED)**

## **Denmark MAL Code**

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Audit - MAL Code
EU Denmark MAL Code:- 0-3
The MAL Code calculations are performed with product and component data.
  Product is a Liquid
  PPG AQUACOVER 40 (TINTED) - Components considered for the MAL Code calculation. {Denmark MAL Code}
    WATER (47.800661678%)
      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
     ACRYLIC POLYMER (29.98002%)
      CAS: SUB100637
      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 = 29980.02
    ALUMINUM SILICATE (13.087314826%)
      CAS: 1332-58-7
      Density: 2.6
      Relative Density: 2.6
      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 = 130.873
     2;2;4-TRIMETHYL-1;3-PENTANEDIOL MONOISOBUTYRATE (2.955%)
      CAS: 25265-77-4
      Density: 0.95
      Relative Density: 0.95
      Molecular Weight: 216.36
      Boiling Point: 257.5
      Vapour Pressure: 0.0098
      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 = 2955
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ZINC OXIDE (2.699865%) 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 = 2699.865 2-BUTOXY ETHANOL (0.669397%) Organic Solvent. CAS: 111-76-2 Density: 0.9 Relative Density: 0.9 Molecular Weight: 118.18 Boiling Point: 171.25 Vapour Pressure: 0.75 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 25. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.067 ALIPHATIC POLYURETHANE RESIN (0.40729008%) CAS: SUB117913 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 = 407.290 nonionic emulsifiers (0.4%) CAS: SUB136362 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 400 acrylic copolymer (0.385%) CAS: SUB109632 Density: 1.09 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 385 PROPYLENE GLYCOL (0.308%) CAS: 57-55-6 Density: 1.036 Relative Density: 1.04 Molecular Weight: 76.11 Boiling Point: 188.2

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Vapour Pressure: 0.15
 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 = 308
Poly(oxy-1,2-ethanediyl), \alpha-sulfo-\omega-(nonylphenoxy)-, branched, ammonium salt (0.20184%)
 CAS: 68649-55-8
  Density: 0
 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 = 0.101
HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES (0.16%)
 CAS: 64742-52-5
  Density: 0.92
 Boiling Point: 478.5
  Vapour Pressure: 0.072
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
 MAL Factor entered: 12. Limit: 0
 FAD entered: 1: Lower Limit: 0.1
 FAD 1 Quotient = 1.6
NAPHTHA (0.16%)
 CAS: 64742-53-6
 Density: 0
 Boiling Point: 478.5
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
 MAL Factor from OEL: 0
 R Phrases: Xn:R20
 FAD: 1. (Default)
 FAD 1 Quotient = 160
QUARTZ (<10 microns) (0.130878%)
  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 = 0.013
 FAD 3 Quotient = 0.131
Ethanol, 2-amino-, compd. with .alpha.-sulfo-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) (1:1) (0.11214%)
 CAS: 51617-74-4
 Density: 0
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
 No MAL Factor calculated.
 FAD: 1. (Default)
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FAD 1 Quotient = 112.14 SODIUM NITRITE (0.096%) CAS: 7632-00-0 Density: 2.2 Relative Density: 2.17 Molecular Weight: 69 Boiling Point: 320 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 = 0.48 FAD 3 Quotient = 0.96 ACRYLIC RESIN (0.0829641%) CAS: SUB102022 Density: 1.09 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 82.964 AMMONIUM HYDROXIDE (0.06245%) CAS: 1336-21-6 Density: 0.9 Relative Density: 0.9 Molecular Weight: 35.06 Boiling Point: 38 Vapour Pressure: 360.03 LBLFactor = 100 (BP=38) MAL Factor entered: 50. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 4 Quotient = 0.002 FAD 3 Quotient = 0.012 AMMONIUM BENZOATE (0.06%) CAS: 1863-63-4 Density: 1.26 Relative Density: 1.26 Molecular Weight: 139.15 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 = 0.06 DIMETHYLAMINOETHANOL (0.042%) Organic Solvent. CAS: 108-01-0 Density: 0.89 Relative Density: 0.89 Molecular Weight: 89.14 Boiling Point: 134.1 Vapour Pressure: 4.59

No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 280. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.004 FAD 2 Quotient = 0.021 hydrophobic silica (0.04%) CAS: SUB136359 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 40 Emitter-green-benzofuranyls impurity (0.04%) CAS: SUB136560 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 40 HYDROXYETHYL CELLULOSE (0.025%) CAS: 9004-62-0 Density: 1.33 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 = 0.25 organically modified powdered clay (0.025%) CAS: SUB138613 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 25 2;2;4-TRIMETHYL-1;3-PENTANEDIOL (0.015%) CAS: 144-19-4 Density: 0 Molecular Weight: 146.26 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 15 2,2,4-Trimethyl-1,3-pentanediol diisobutyrate (0.015%) CAS: 6846-50-0 Density: 0.94 Molecular Weight: 286.46 Boiling Point: 280 Vapour Pressure: 0.0099 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 = 0.15ISOBUTYRALDEHYDE (0.015%) CAS: 78-84-2 Density: 0.794 Relative Density: 0.8 Molecular Weight: 72.12 Boiling Point: 64.4 Vapour Pressure: 173 LBLFactor = 100 (BP=64.4) R Phrases: F;R11 Xn;R22 Xi;R36 MAL Factor from Sub-Annex 2: 1000 FAD: 1. (Default) FAD 1 Quotient = 15 N-BUTYL METHACRYLATE (0.0099%) Organic Solvent. CAS: 97-88-1 Density: 0.89 Relative Density: 0.9 Molecular Weight: 142.22 Boiling Point: 163 Vapour Pressure: 1.59 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 16. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. FAD 5 Quotient = 0.010 surfactant (0.0043359%) CAS: SUB143026 Density: 0 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) **FAD 1 Quotient = 4.336** ISOTHIAZOLONE SOLUTION (0.001824396%) CAS: 55965-84-9 Density: 0.9 Molecular Weight: 264.76 No LBL Factor entered or estimated from CAS Number or Boiling Point. No MAL Factor calculated. FAD: 1. (Default) FAD 1 Quotient = 1.824 Copper Nitrate (0.0015%) CAS: 3251-23-8 Density: 0 Molecular Weight: 187.56 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 2 Quotient = 0.000METHACRYLIC ACID (0.001045%) Organic Solvent. CAS: 79-41-4 Density: 1.014 Relative Density: 1.02 Molecular Weight: 86.1 Boiling Point: 163 Vapour Pressure: 0.73 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 286. Limit: 0 FAD entered: 1: Lower Limit: No limit specified. A very low value will be used. FAD 3 Quotient = 0.001 FAD 5 Quotient = 0.000 METHYL METHACRYLATE (0.001045%) Organic Solvent. CAS: 80-62-6 Density: 0.94 Relative Density: 0.94 Molecular Weight: 100.13 Boiling Point: 100.36 Vapour Pressure: 27.75 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 = 0.000 FAD 3 Quotient = 0.001 MANGANESE (0.00103116%) CAS: 7439-96-5 Density: 7.47 Molecular Weight: 54.94 Boiling Point: 1962 Vapour Pressure: 0 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 2 Quotient = 0.001 ETHYLENE GLYCOL (0.000603%) Organic Solvent. CAS: 107-21-1 Density: 1.11 Relative Density: 1.1 Molecular Weight: 62.07 Boiling Point: 197.4 Vapour Pressure: 0.05 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 2 Quotient = 0.000ACRYLONITRILE (0.00054%) Organic Solvent. Carcinogen. CAS: 107-13-1 Density: 0.806 Relative Density: 0.8 Molecular Weight: 53.06 Boiling Point: 77.3 Vapour Pressure: 82.51 No LBL Factor entered or estimated from CAS Number or Boiling Point. MAL Factor entered: 5. Limit: 0 FAD entered: 1; Lower Limit: No limit specified. A very low value will be used. **FAD 6 Quotient = 0.005** HEXAN-1-OL (0.00044676%) CAS: 111-27-3 Density: 0.814 Relative Density: 0.82 Molecular Weight: 102.18 Boiling Point: 155 Vapour Pressure: 0.93 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 = 0.000 ETHYL ALCOHOL (0.0004365%) Organic Solvent. CAS: 64-17-5 Density: 0.786 Relative Density: 0.8 Molecular Weight: 46.08 Boiling Point: 78.29 Vapour Pressure: 42.95 LBLFactor = 200 (CAS=64175) MAL Factor entered: 7. Limit: 0 FAD entered: 1: Lower Limit: 0 FAD 1 Quotient = 0.436 ZINC (0.000322568%) CAS: 7440-66-6 Density: 7.1 Relative Density: 7.14 Molecular Weight: 65.37 **Boiling Point: 908** Vapour Pressure: 0.000000075 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.

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FAD 1 Quotient = 0.003
COPPER (0.000318602%)
 CAS: 7440-50-8
 Density: 8.78
 Relative Density: 8.9
 Molecular Weight: 63.55
 Boiling Point: 2595
 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 2 Quotient = 0.000
2-ETHYLHEXANOIC ACID (0.00024276%)
 CAS: 149-57-5
 Density: 0.9
 Relative Density: 0.9
 Molecular Weight: 144.24
 Boiling Point: 227.5
 Vapour Pressure: 0.03
 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 = 0.000
residual monomers (0.000204%)
 CAS: SUB142981
 Density: 0
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
 No MAL Factor calculated.
 FAD: 1. (Default)
 FAD 1 Quotient = 0.204
LEAD OXIDE (0.000135%)
  Carcinogen.
 CAS: 1317-36-8
 Density: 9.5
 Molecular Weight: 223.2
  Boiling Point: 1470
 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 = 0.000
 FAD 3 Quotient = 0.001
antioxidant (0.00009996%)
 CAS: SUB143683
 Density: 0
 No LBL Factor entered or estimated from CAS Number or Boiling Point.
 No MAL Factor calculated.
 FAD: 1. (Default)
 FAD 1 Quotient = 0.100
VANADIUM (0.000044948%)
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CAS: 7440-62-2 Density: 6.57

Relative Density: 6.11 Molecular Weight: 50.94 Boiling Point: 3000

No LBL Factor entered or estimated from CAS Number or Boiling Point.

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 0.045 NICKEL (0.000040982%)

Carcinogen. CAS: 7440-02-0 Density: 8.9

Relative Density: 8.9
Molecular Weight: 58.71

Boiling Point: 2730

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 5 Quotient = 0.000 FAD 6 Quotient = 0.000

COBALT (0.000029084%)

Carcinogen. CAS: 7440-48-4 Density: 8.9

Relative Density: 8.92 Molecular Weight: 58.93 Boiling Point: 2870

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 = 0.000 ARSENIC (0.000010576%)

Carcinogen. CAS: 7440-38-2 Density: 5.7

Relative Density: 5.73 Molecular Weight: 74.92 Vapour Pressure: 0

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 = 0.000

FORMALDEHYDE (0.00000999%)

Carcinogen. CAS: 50-00-0 Density: 1.09

Relative Density: 0.812

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Molecular Weight: 30.03
   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
  BARIUM (0.000009254%)
   CAS: 7440-39-3
   Density: 3.6
    Relative Density: 3.6
    Molecular Weight: 137.34
    Boiling Point: 1640
   No LBL Factor entered or estimated from CAS Number or Boiling Point.
    MAL Factor from OEL: 0
   R Phrases: F;R15 Xi;R38 Xi;R36 Xi;R37
   FAD: 1. (Default)
   FAD 1 Quotient = 0.009
  1,4-DIOXANE (0.000003876%)
    Organic Solvent.
    Carcinogen.
    CAS: 123-91-1
    Density: 1.03
    Relative Density: 1.03
   Molecular Weight: 88.12
   Boiling Point: 101.15
   Vapour Pressure: 30.75
   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
Density = 1.188. Entered value.
Figure-before-the dash = 0
  WATER(@47.80%). MAL Factor = 0. Total increased by 47.80*0=0. Running Total = 0
  ALUMINUM SILICATE (@13.09%). MAL Factor = 0. Total increased by 13.09*0=0. Running Total = 0
  2;2;4-TRIMETHYL-1;3-PENTANEDIOL MONOISOBUTYRATE(@2.96%), MAL Factor = 0. Total increased by 2.96*0=0. Running Total = 0
  ZINC OXIDE(@2.70%). MAL Factor = 0. Total increased by 2.70*0=0. Running Total = 0
  2-BUTOXY ETHANOL(@0.67%). MAL Factor = 25. Total increased by 0.67*25=16.73. Running Total = 16.73
  PROPYLENE GLYCOL(@0.31%). MAL Factor = 0. Total increased by 0.31*0=0. Running Total = 16.73
  Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(nonylphenoxy)-, branched, ammonium salt(@0.20%). MAL Factor = 0. Total increased by 0.20*0=0. Running Total = 16.73
  HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES(@0.16%). MAL Factor = 12. Total increased by 0.16*12=1.92. Running Total = 18.65
  NAPHTHA(@0.16%). MAL Factor = 0. Total increased by 0.16*0=0.00. Running Total = 18.65
  QUARTZ (<10 microns)(@0.13%). MAL Factor = 0. Total increased by 0.13*0=0. Running Total = 18.65
  SODIUM NITRITE(@0.10%). MAL Factor = 0. Total increased by 0.10*0=0. Running Total = 18.65
  AMMONIUM HYDROXIDE(@0.06%). MAL Factor = 50. Total increased by 0.06*50=3.12. Running Total = 21.78
  AMMONIUM BENZOATE(@0.06%). MAL Factor = 0. Total increased by 0.06*0=0. Running Total = 21.78
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DIMETHYLAMINOETHANOL(@0.04%), MAL Factor = 280. Total increased by 0.04*280=11.76. Running Total = 33.54
    HYDROXYETHYL CELLULOSE(@0.02%), MAL Factor = 0. Total increased by 0.02*0=0. Running Total = 33.54
    2.2.4-Trimethyl-1.3-pentanediol diisobutyrate(@0.02%). MAL Factor = 0. Total increased by 0.02*0=0. Running Total = 33.54
    ISOBUTYRALDEHYDE(@0.02%), MAL Factor = 1000, Total increased by 0.02*1000=15.00, Running Total = 48.54
    N-BUTYL METHACRYLATE(@0.01%). MAL Factor = 16. Total increased by 0.01*16=0.16. Running Total = 48.70
    Copper Nitrate(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 48.70
    METHACRYLIC ACID(@0.00%). MAL Factor = 286. Total increased by 0.00*286=0.30. Running Total = 48.99
    METHYL METHACRYLATE(@0.00%), MAL Factor = 46. Total increased by 0.00*46=0.05. Running Total = 49.04
    MANGANESE(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.04
    ETHYLENE GLYCOL(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.04
    ACRYLONITRILE(@0.00%). MAL Factor = 5. Total increased by 0.00*5=0.00. Running Total = 49.05
    HEXAN-1-OL(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    ETHYL ALCOHOL(@0.00%), MAL Factor = 7. Total increased by 0.00*7=0.00, Running Total = 49.05
    ZINC(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    COPPER(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    2-ETHYLHEXANOIC ACID(@0.00%), MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    LEAD OXIDE(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    NICKEL(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    COBALT(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    ARSENIC(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0. Running Total = 49.05
    FORMALDEHYDE(@0.00%). MAL Factor = 2500. Total increased by 0.00*2500=0.02. Running Total = 49.07
    BARIUM(@0.00%). MAL Factor = 0. Total increased by 0.00*0=0.00. Running Total = 49.07
    1,4-DIOXANE(@0.00%). MAL Factor = 390. Total increased by 0.00*390=0.00. Running Total = 49.08
    Figure-before-the-dash calculated as 0. Via MAL Factor Total * Density (49.08 * 1.188) giving a MAL Number of 58
  MAL Number = Density (1.188) * Sum (49.08) = 58
  Figure-after-the-dash = 3. Calculated from component data.
    ACRYLIC POLYMER (@29.98%) Increasing Total for FAD1 by 29980.02, giving 29980.02
    ALUMINUM SILICATE (@13.09%) Increasing Total for FAD1 by 130.87314826, giving 30110.89314826
    2;2;4-TRIMETHYL-1;3-PENTANEDIOL MONOISOBUTYRATE (@2.96%) Increasing Total for FAD1 by 2955, giving 33065.89314826
    ZINC OXIDE (@2.70%) Increasing Total for FAD1 by 2699.865, giving 35765,75814826
    2-BUTOXY ETHANOL (@0.67%) Increasing Total for FAD3 by 0.0669397, giving 0.0669397
    ALIPHATIC POLYURETHANE RESIN (@0.41%) Increasing Total for FAD1 by 407.29008, giving 36173.04822826
    nonionic emulsifiers (@0.4%) Increasing Total for FAD1 by 400, giving 36573.04822826
    acrylic copolymer (@0.38%) Increasing Total for FAD1 by 385, giving 36958.04822826
    PROPYLENE GLYCOL (@0.31%) Increasing Total for FAD1 by 308, giving 37266.04822826
    Poly(oxy-1,2-ethanediyl), α-sulfo-ω-(nonylphenoxy)-, branched, ammonium salt (@0.20%) Increasing Total for FAD3 by 0.10092, giving 0.1678597
    HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES (@0.16%) Increasing Total for FAD1 by 1.6, giving 37267.64822826
    NAPHTHA (@0.16%) Increasing Total for FAD1 by 160, giving 37427.64822826
    QUARTZ (<10 microns) (@0.13%) Increasing Total for FAD6 by 0.0130878, giving 0.0130878
    QUARTZ (<10 microns) (@0.13%) Increasing Total for FAD3 by 0.130878, giving 0.2987377
    Ethanol, 2-amino-, compd. with .alpha.-sulfo-.omega.-(nonylphenoxy)poly(oxy-1,2-ethanediyl) (1:1) (@0.11%) Increasing Total for FAD1 by 112.14, giving
37539.78822826
    SODIUM NITRITE (@0.10%) Increasing Total for FAD6 by 0.48, giving 0.4930878
    SODIUM NITRITE (@0.10%) Increasing Total for FAD3 by 0.96, giving 1.2587377
    ACRYLIC RESIN (@0.08%) Increasing Total for FAD1 by 82.9641, giving 37622.75232826
    AMMONIUM HYDROXIDE (@0.06%) Increasing Total for FAD4 by 0.0017842857142857142857, giving 0.0017842857142857142857
    AMMONIUM HYDROXIDE (@0.06%) Increasing Total for FAD3 by 0.01249, giving 1.2712277
    AMMONIUM BENZOATE (@0.06%) Increasing Total for FAD3 by 0.06, giving 1.3312277
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DIMETHYLAMINOETHANOL (@0.04%) Increasing Total for FAD3 by 0.0042, giving 1.3354277 DIMETHYLAMINOETHANOL (@0.04%) Increasing Total for FAD2 by 0.021, giving 0.021 hydrophobic silica (@0.04%) Increasing Total for FAD1 by 40, giving 37662,75232826 Emitter-green-benzofuranyls impurity (@0.04%) Increasing Total for FAD1 by 40, giving 37702,75232826 HYDROXYETHYL CELLULOSE (@0.02%) Increasing Total for FAD1 by 0.25, giving 37703.00232826 organically modified powdered clay (@0.02%) Increasing Total for FAD1 by 25, giving 37728.00232826 2:2:4-TRIMETHYL-1:3-PENTANEDIOL (@0.02%) Increasing Total for FAD1 by 15, giving 37743.00232826 2.2.4-Trimethyl-1.3-pentanediol diisobutyrate (@0.02%) Increasing Total for FAD1 by 0.15, giving 37743.15232826 ISOBUTYRALDEHYDE (@0.02%) Increasing Total for FAD1 by 15, giving 37758.15232826 N-BUTYL METHACRYLATE (@0.0099%) Increasing Total for FAD5 by 0.0099, giving 0.0099 surfactant (@0.00%) Increasing Total for FAD1 by 4.3359, giving 37762.48822826 ISOTHIAZOLONE SOLUTION (@0.00%) Increasing Total for FAD1 by 1.824396, giving 37764.31262426 Copper Nitrate (@0.00%) Increasing Total for FAD2 by 0.0005, giving 0.0215 METHACRYLIC ACID (@0.001045%) Increasing Total for FAD5 by 0.000209, giving 0.010109 METHACRYLIC ACID (@0.00%) Increasing Total for FAD3 by 0.001045, giving 1.3364727 METHYL METHACRYLATE (@0.001045%) Increasing Total for FAD5 by 0.000209, giving 0.010318 METHYL METHACRYLATE (@0.00%) Increasing Total for FAD3 by 0.001045, giving 1.3375177 MANGANESE (@0.00%) Increasing Total for FAD2 by 0.00103116, giving 0.02253116 ETHYLENE GLYCOL (@0.00%) Increasing Total for FAD2 by 0.0000603, giving 0.02259146 ACRYLONITRILE (@0.00%) Increasing Total for FAD6 by 0.0054, giving 0.4984878 HEXAN-1-OL (@0.00%) Increasing Total for FAD3 by 0.00044676, giving 1.33796446 ETHYL ALCOHOL (@0.00%) Increasing Total for FAD1 by 0.4365, giving 37764.74912426 ZINC (@0.00%) Increasing Total for FAD1 by 0.00322568, giving 37764.75234994 2-ETHYLHEXANOIC ACID (@0.00%) Increasing Total for FAD3 by 0.00024276, giving 1.33820722 residual monomers (@0.00%) Increasing Total for FAD1 by 0.204, giving 37764.95634994 LEAD OXIDE (@0.00%) Increasing Total for FAD6 by 0.0000135, giving 0.4985013 LEAD OXIDE (@0.00%) Increasing Total for FAD3 by 0.00054, giving 1.33874722 antioxidant (@0.00%) Increasing Total for FAD1 by 0.09996, giving 37765,05630994 VANADIUM (@0.00%) Increasing Total for FAD1 by 0.044948, giving 37765.10125794 NICKEL (@0.00%) Increasing Total for FAD6 by 0.0000081964, giving 0.4985094964 NICKEL (@0.000040982%) Increasing Total for FAD5 by 0.00040982, giving 0.01072782 COBALT (@0.00%) Increasing Total for FAD6 by 0.00029084, giving 0.4988003364 ARSENIC (@0.00%) Increasing Total for FAD6 by 0.00005288, giving 0.4988532164 FORMALDEHYDE (@0.00%) Increasing Total for FAD6 by 0.00000999, giving 0.4988632064 FORMALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.0000999, giving 1.33884712 BARIUM (@0.00%) Increasing Total for FAD1 by 0.009254, giving 37765.11051194 1,4-DIOXANE (@0.00%) Increasing Total for FAD6 by 0.0000003876, giving 0.4988635940 1,4-DIOXANE (@0.00%) Increasing Total for FAD3 by 0.00003876, giving 1.33888588 Figure-after-the-dash = 3. Total of components with FAD=3 is >=1. Low Boiling Liquid = False. AMMONIUM HYDROXIDE (@0.06%) Total increased by 0.06\*50/100=0.03. Running Total = 0.03 ISOBUTYRALDEHYDE (@0.02%) Total increased by 0.02\*1000/100=0.15. Running Total = 0.18 ETHYL ALCOHOL (@0.00%) Total increased by 0.00\*7/200=0.00. Running Total = 0.18 Density \* (Sum of components Concentration \* MALFactor/LBLFactor) = 0.22 Recommended Usage Temperature is < 40C, hence no MAL Code in use is assigned.

EU Denmark RFU MAL Code:-Nothing was found

**New Fields for IA3.3** 

MAL Number : 0-3

MAL Number : 58.3011

MAL Number (RFU) : Not applicable.

**Protection based on MAL** 

: 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: 0-3

**Application:** 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. 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.

- Coveralls must be worn.

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

- 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.

- Gas filter 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.

## Protection based on R-F-U MAL

: Not available.

Not available.

Not available.