

# Audit - EU DK MAL Code

## PPG VIKOTE 56 BLUE 1199

### Denmark MAL Code

#### Audit - MAL Code

EU Denmark MAL Code:- 5-3

The MAL Code calculations are performed with product and component data.

Product is a Liquid

PPG VIKOTE 56 BLUE 1199 - Components considered for the MAL Code calculation. {Denmark MAL Code}

Hydrocarbons, C9, aromatics (42.42072%)

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 = 424.207

acrylic resin (28.8252%)

CAS: SUB110964

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 = 28825.2

XYLENES (14.6804002%)

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: 3; Lower Limit: 10

FAD 3 Quotient = 1.468

FAD 1 Quotient = 73.402

ETHYLBENZENE (3.9251651%)

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 = 0.393

C14-C17 CHLORINATED HYDROCARBONS (3.57%)

CAS: 85535-85-9  
Density: 1.21  
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: 0  
FAD 1 Quotient = 3570

TITANIUM DIOXIDE (1.97726888%)

CAS: 13463-67-7  
Density: 4.1  
Relative Density: 4.26  
Molecular Weight: 79.9  
Boiling Point: 2750  
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 = 1977.269

COPPER PHTHALOCYANINE (1.89007%)

CAS: 147-14-8  
Density: 1.62  
Molecular Weight: 576.1  
Vapour Pressure: 0.000072  
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 = 0.630

12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (0.7254%)

CAS: 220926-97-6  
Density: 1.02  
Vapour Pressure: 0.000326  
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 = 725.4

QUATERN.AM.CPS,BIS(HYDROGEN.TALLOW ALKYL)DIMET.-,BENTONITE (0.562658%)

CAS: 68953-58-2  
Density: 1.7  
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 = 5.627

cyclohexanone (0.30783%)

Organic Solvent.

CAS: 108-94-1

Density: 0.946

Relative Density: 0.95

Molecular Weight: 98.14

Boiling Point: 154.3

Vapour Pressure: 3.75

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

MAL Factor entered: 70. Limit: 0

FAD entered: 1; Lower Limit: 0

FAD 1 Quotient = 307.83

ETHYL ALCOHOL (0.275489125%)

Organic Solvent.

CAS: 64-17-5

Density: 0.786

Relative Density: 0.8

Molecular Weight: 46.08

Boiling Point: 78.29

Vapour Pressure: 42.94865

LB�Factor = 200 (CAS=64175)

MAL Factor entered: 7. Limit: 0

FAD entered: 1; Lower Limit: 0

FAD 1 Quotient = 275.489

BLOCKED COPOLYMER (0.1305%)

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 = 1.305

N,N''-naphthalene-1,5-diylbis[N'-(3-[(2-ethylhexyl)oxy]propyl)urea] (0.1085%)

CAS: 71216-01-8

Density: 0

Molecular Weight: 584.83

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

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 108.5

[[2,2',2''-[29H,31H-phthalocyaninetriyltris(methylene)]tris[1H-isoindole-1,3(2H)-dionato]](2-)-N29,N30,N31,N32]copper (0.1085%)

CAS: 59160-79-1

Density: 0

Molecular Weight: 1053.49

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 = 0.036

TOLUENE (0.07455432%)

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 = 0.007

ALUMINUM HYDROXIDE (0.0742%)

CAS: 21645-51-2

Density: 2.42

Molecular Weight: 78

Vapour Pressure: 0.0675

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 = 0.742

[N,N,N',N',N'',N''-hexaethyl-29H,31H-phthalocyaninetrimethylaminato(2-)-N29,N30,N31,N32]copper tris(dodecylbenzenesulphonate) (0.06293%)

CAS: 75247-18-6

Density: 0

Molecular Weight: 1810.99

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 = 0.021

non-hazardous polymer (0.0546%)

CAS: SUB137438

Density: 0

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

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 54.6

1-METHOXY-2-PROPYL ACETATE (0.05404857844422%)

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 = 54.049

N-BUTYL ACETATE (0.0354335896%)

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 = 35.434

TITANIUM DIOXIDE (<10 microns) (0.01977112%)

Carcinogen.

CAS: 13463-67-7

Density: 4.1

Relative Density: 4.26

Molecular Weight: 79.9

Boiling Point: 2750

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 = 19.771

CARBON BLACK (0.017052%)

CAS: 1333-86-4

Density: 1.8

Relative Density: 1.95

Molecular Weight: 12.01

Boiling Point: 4200

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 = 0.001

FAD 3 Quotient = 0.002

TRIMETHYLOLPROPANE (0.01696%)

CAS: 77-99-6

Density: 1.084

Molecular Weight: 134.2

Boiling Point: 304.2

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 1 Quotient = 0.170

SILICA (0.01484%)

CAS: 7631-86-9

Density: 2

Relative Density: 2.2

Molecular Weight: 60.08

Boiling Point: 2230

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

MAL Factor entered: 0. Limit: 0

R Phrases: None

FAD: 1. (Default)

FAD 1 Quotient = 14.84

METHYL ALCOHOL (0.0145024203452%)

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 = 0.015

QUARTZ (>10 microns) (0.0116%)

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 1 Quotient = 0.116

WATER (0.0106136545156%)

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 copolymer (0.0096813808%)

CAS: SUB110897

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 = 9.681  
ZIRCONIUM OXIDE (0.00636%)  
CAS: 1314-23-4  
Density: 5.85  
Molecular Weight: 123.22  
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 = 0.064  
QUARTZ (<10 microns) (0.005742%)  
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 = 0.001  
FAD 3 Quotient = 0.006  
BENZENE (0.00277818%)  
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 = 0.028  
BLOCK COPOLYMER (0.0023533328%)  
CAS: SUB101356  
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 = 2.353  
Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl (0.00216969%)  
CAS: 63148-56-1  
Density: 0  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
No MAL Factor calculated.  
FAD: 1. (Default)

FAD 1 Quotient = 2.170  
DIMETHYL GLUTARATE (0.0008096054694%)  
CAS: 1119-40-0  
Density: 1.09  
Molecular Weight: 160.17  
Boiling Point: 216  
Vapour Pressure: 0.062  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
MAL Factor entered: 4. Limit: 0  
FAD entered: 1; Lower Limit: 0  
FAD 1 Quotient = 0.810  
2-METHOXY-1-PROPYL ACETATE (0.00035151111152%)  
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 = 0.002  
organotin compound (0.0002871%)  
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 = 0.287  
DIMETHYL SUCCINATE (0.0002771295254%)  
CAS: 106-65-0  
Density: 1.119  
Molecular Weight: 146.16  
Boiling Point: 196.2  
Vapour Pressure: 0.18  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
MAL Factor entered: 5. Limit: 0  
FAD entered: 1; Lower Limit: 0  
FAD 1 Quotient = 0.277  
DIMETHYL ADIPATE (0.0001204121737%)  
CAS: 627-93-0  
Density: 1.062  
Molecular Weight: 174.22  
Boiling Point: 230.9  
Vapour Pressure: 0.021  
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 = 0.001

METHYL METHACRYLATE (0.00008642361182%)

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 = 0.000

FAD 3 Quotient = 0.000

CUMENE (0.000058%)

Organic Solvent.

CAS: 98-82-8

Density: 0.86

Relative Density: 0.9

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

2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo- (0.00004147434382%)

CAS: 7534-94-3

Density: 0.983

Molecular Weight: 222.33

Boiling Point: 275

Vapour Pressure: 0.009

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 3 Quotient = 0.000

N-BUTYL METHACRYLATE (0.00004107671568%)

Organic Solvent.

CAS: 97-88-1

Density: 0.89

Relative Density: 0.9

Molecular Weight: 142.22

Boiling Point: 163

Vapour Pressure: 1.59014

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 = 0.000

PROPYLENE GLYCOL MONOMETHYL ETHER (0.0000233457952%)

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 = 0.023

2-TERT-BUTYLAMINOETHYL METHACRYLATE (0.000003457636%)

CAS: 3775-90-4

Density: 0.914

Relative Density: 0.9

Molecular Weight: 185.3

Boiling Point: 215

Vapour Pressure: 0.04

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

FAD 5 Quotient = 0.000

DENATONIUM BENZOATE (0.000002755%)

CAS: 3734-33-6

Density: 0

Molecular Weight: 446.59

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

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 0.003

ACETIC ACID (0.0000022492936%)

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: 400. 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

1-BUTANOL (0.0000019007688%)

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 = 0.002

BUTYLATED HYDROXYTOLUENE (0.0000007600635%)

CAS: 128-37-0

Density: 1.03

Relative Density: 1.048

Molecular Weight: 220.39

Boiling Point: 265

Vapour Pressure: 0.00825

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

ACETONE (0.000000435%)

Organic Solvent.

CAS: 67-64-1

Density: 0.791

Relative Density: 0.8

Molecular Weight: 58.09

Boiling Point: 56.05

Vapour Pressure: 180.01463

LB�Factor = 100 (BP=56.05)

MAL Factor entered: 23. Limit: 0

FAD entered: 1; Lower Limit: 0

FAD 1 Quotient = 0.000

ISOBUTYL METHACRYLATE (0.00000041491632%)

Organic Solvent.

CAS: 97-86-9

Density: 0.88

Relative Density: 0.8858

Molecular Weight: 142.22

Boiling Point: 155

Vapour Pressure: 1.58263

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

FAD 5 Quotient = 0.000

OCTAMETHYLCYCLOTETRASILOXANE (0.00000031%)

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

TIN (0.00000004978204%)

CAS: 7440-31-5

Density: 7.2

Relative Density: 7.28

Molecular Weight: 118.69

Boiling Point: 2260

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 = 0.000

4-METHOXYPHENOL (0.00000001728818%)

CAS: 150-76-5

Density: 1.6

Relative Density: 1.55

Molecular Weight: 124.15

Boiling Point: 243

Vapour Pressure: 0.00675

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

Density = 0.98. Entered value.

Figure-before-the dash = 5

Hydrocarbons, C9, aromatics (@42.42%). MAL Factor = 58. Total increased by  $42.42 \times 58 = 2460.40$ . Running Total = 2460.40

XYLENES(@14.68%). MAL Factor = 46. Total increased by  $14.68 \times 46 = 675.30$ . Running Total = 3135.70

ETHYLBENZENE(@3.93%). MAL Factor = 46. Total increased by  $3.93 \times 46 = 180.56$ . Running Total = 3316.26

C14-C17 CHLORINATED HYDROCARBONS(@3.57%). MAL Factor = 0. Total increased by  $3.57 \times 0 = 0$ . Running Total = 3316.26

TITANIUM DIOXIDE(@1.98%). MAL Factor = 0. Total increased by  $1.98 \times 0 = 0$ . Running Total = 3316.26

COPPER PHTALOCYANINE(@1.89%). MAL Factor = 0. Total increased by  $1.89 \times 0 = 0$ . Running Total = 3316.26

12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine(@0.73%). MAL Factor = 0. Total increased by  $0.73 \times 0 = 0.00$ .

Running Total = 3316.26

QUATERN.AM.CPS,BIS(HYDROGEN.TALLOW ALKYL)DIMET.-,BENTONITE(@0.56%). MAL Factor = 0. Total increased by  $0.56 \times 0 = 0$ . Running Total = 3316.26

cyclohexanone(@0.31%). MAL Factor = 70. Total increased by  $0.31 \times 70 = 21.55$ . Running Total = 3337.81

ETHYL ALCOHOL(@0.28%). MAL Factor = 7. Total increased by  $0.28 \times 7 = 1.93$ . Running Total = 3339.73

BLOCKED COPOLYMER(@0.13%). MAL Factor = 0. Total increased by  $0.13 \times 0 = 0$ . Running Total = 3339.73

[[2,2',2''-[29H,31H-phthalocyaninetriyltris(methylene)]tris[1H-isoindole-1,3(2H)-dionato]](2-)-N29,N30,N31,N32]copper(@0.11%). MAL Factor = 0. Total increased by  $0.11 \times 0 = 0$ . Running Total = 3339.73

TOLUENE(@0.07%). MAL Factor = 74. Total increased by  $0.07 \times 74 = 5.52$ . Running Total = 3345.25  
ALUMINUM HYDROXIDE(@0.07%). MAL Factor = 0. Total increased by  $0.07 \times 0 = 0$ . Running Total = 3345.25  
[N,N,N',N',N'',N''-hexaethyl-29H,31H-phthalocyaninetrimethylaminate(2-)-N29,N30,N31,N32]copper tris(dodecylbenzenesulphonate)(@0.06%). MAL Factor = 0. Total increased by  $0.06 \times 0 = 0$ . Running Total = 3345.25  
1-METHOXY-2-PROPYL ACETATE(@0.05%). MAL Factor = 19. Total increased by  $0.05 \times 19 = 1.03$ . Running Total = 3346.28  
N-BUTYL ACETATE(@0.04%). MAL Factor = 14. Total increased by  $0.04 \times 14 = 0.50$ . Running Total = 3346.77  
TITANIUM DIOXIDE (<10 microns)(@0.02%). MAL Factor = 0. Total increased by  $0.02 \times 0 = 0$ . Running Total = 3346.77  
CARBON BLACK(@0.02%). MAL Factor = 0. Total increased by  $0.02 \times 0 = 0$ . Running Total = 3346.77  
TRIMETHYLOLPROPANE(@0.02%). MAL Factor = 0. Total increased by  $0.02 \times 0 = 0$ . Running Total = 3346.77  
SILICA(@0.01%). MAL Factor = 0. Total increased by  $0.01 \times 0 = 0$ . Running Total = 3346.77  
METHYL ALCOHOL(@0.01%). MAL Factor = 54. Total increased by  $0.01 \times 54 = 0.78$ . Running Total = 3347.56  
QUARTZ (>10 microns)(@0.01%). MAL Factor = 0. Total increased by  $0.01 \times 0 = 0$ . Running Total = 3347.56  
WATER(@0.01%). MAL Factor = 0. Total increased by  $0.01 \times 0 = 0$ . Running Total = 3347.56  
ZIRCONIUM OXIDE(@0.01%). MAL Factor = 0. Total increased by  $0.01 \times 0 = 0$ . Running Total = 3347.56  
QUARTZ (<10 microns)(@0.01%). MAL Factor = 0. Total increased by  $0.01 \times 0 = 0$ . Running Total = 3347.56  
BENZENE(@0.00%). MAL Factor = 880. Total increased by  $0.00 \times 880 = 2.44$ . Running Total = 3350.00  
DIMETHYL GLUTARATE(@0.00%). MAL Factor = 4. Total increased by  $0.00 \times 4 = 0.00$ . Running Total = 3350.01  
2-METHOXY-1-PROPYL ACETATE(@0.00%). MAL Factor = 181. Total increased by  $0.00 \times 181 = 0.06$ . Running Total = 3350.07  
organotin compound(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0.00$ . Running Total = 3350.07  
DIMETHYL SUCCINATE(@0.00%). MAL Factor = 5. Total increased by  $0.00 \times 5 = 0.00$ . Running Total = 3350.07  
DIMETHYL ADIPATE(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0$ . Running Total = 3350.07  
METHYL METHACRYLATE(@0.00%). MAL Factor = 46. Total increased by  $0.00 \times 46 = 0.00$ . Running Total = 3350.07  
CUMENE(@0.00%). MAL Factor = 1. Total increased by  $0.00 \times 1 = 0.00$ . Running Total = 3350.07  
2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0$ . Running Total = 3350.07  
N-BUTYL METHACRYLATE(@0.00%). MAL Factor = 16. Total increased by  $0.00 \times 16 = 0.00$ . Running Total = 3350.08  
PROPYLENE GLYCOL MONOMETHYL ETHER(@0.00%). MAL Factor = 28. Total increased by  $0.00 \times 28 = 0.00$ . Running Total = 3350.08  
2-TERT-BUTYLAMINOETHYL METHACRYLATE(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0$ . Running Total = 3350.08  
ACETIC ACID(@0.00%). MAL Factor = 400. Total increased by  $0.00 \times 400 = 0.00$ . Running Total = 3350.08  
1-BUTANOL(@0.00%). MAL Factor = 67. Total increased by  $0.00 \times 67 = 0.00$ . Running Total = 3350.08  
BUTYLATED HYDROXYTOLUENE(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0$ . Running Total = 3350.08  
ACETONE(@0.00%). MAL Factor = 23. Total increased by  $0.00 \times 23 = 0.00$ . Running Total = 3350.08  
ISOBUTYL METHACRYLATE(@0.00%). MAL Factor = 1. Total increased by  $0.00 \times 1 = 0.00$ . Running Total = 3350.08  
OCTAMETHYLCYCLOTETRASILOXANE(@0.00%). MAL Factor = 1. Total increased by  $0.00 \times 1 = 0.00$ . Running Total = 3350.08  
TIN(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0.00$ . Running Total = 3350.08  
4-METHOXYPHENOL(@0.00%). MAL Factor = 0. Total increased by  $0.00 \times 0 = 0$ . Running Total = 3350.08  
Figure-before-the-dash calculated as 5. Via MAL Factor Total \* Density ( $3350.08 \times 0.98$ ) giving a MAL Number of 3283  
MAL Number = Density (0.98) \* Sum (3350.08) = 3283  
Figure-after-the-dash = 3. Calculated from component data.  
Hydrocarbons, C9, aromatics (@42.42%) Increasing Total for FAD1 by 424.2072, giving 424.2072  
acrylic resin (@28.83%) Increasing Total for FAD1 by 28825.2, giving 29249.4072  
XYLENES (@14.68%) Increasing Total for FAD3 by 1.46804002, giving 1.46804002  
XYLENES (@14.68%) Increasing Total for FAD1 by 73.402001, giving 29322.809201  
ETHYLBENZENE (@3.93%) Increasing Total for FAD3 by 0.39251651, giving 1.86055653  
C14-C17 CHLORINATED HYDROCARBONS (@3.57%) Increasing Total for FAD1 by 3570, giving 32892.809201  
TITANIUM DIOXIDE (@1.98%) Increasing Total for FAD1 by 1977.26888, giving 34870.078081  
COPPER PHTHALOCYANINE (@1.89%) Increasing Total for FAD2 by 0.63002333333333333333333333333333, giving 0.63002333333333333333333333333333  
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (@0.73%) Increasing Total for FAD1 by 725.4, giving 35595.478081



BUTYLATED HYDROXYTOLUENE (@0.00%) Increasing Total for FAD3 by 0.0000007600635, giving 1.89015123887255  
ACETONE (@0.00%) Increasing Total for FAD1 by 0.000435, giving 36489.621153324757  
ISOBUTYL METHACRYLATE (@0.00000041491632%) Increasing Total for FAD5 by 0.000000082983264, giving 0.000067430817272  
ISOBUTYL METHACRYLATE (@0.00%) Increasing Total for FAD3 by 0.00000041491632, giving 1.89015165378887  
OCTAMETHYLCYCLOTETRASILOXANE (@0.00%) Increasing Total for FAD3 by 0.00000031, giving 1.89015196378887  
TIN (@0.00%) Increasing Total for FAD1 by 0.00004978204, giving 36489.621203106797  
4-METHOXYPHENOL (@0.00000001728818%) Increasing Total for FAD5 by 0.00000001728818, giving 0.000067448105452  
Figure-after-the-dash =3. Total of components with FAD=3 is >=1.

Low Boiling Liquid = False.

ETHYL ALCOHOL (@0.28%) Total increased by  $0.28 \times 7 / 200 = 0.01$ . Running Total = 0.01  
METHYL ALCOHOL (@0.01%) Total increased by  $0.01 \times 54 / 100 = 0.01$ . Running Total = 0.02  
ACETONE (@0.00%) Total increased by  $0.00 \times 23 / 100 = 0.00$ . Running Total = 0.02  
Density \* (Sum of components Concentration \* MALFactor/LBLFactor) = 0.02

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** : 5-3  
**MAL Number** : 3283.08  
**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: 5-3

**Application:** When spraying in new\* booths if the operator is outside the spray zone. During non-atomizing spraying in existing\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside 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 full mask 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.

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 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.