

# Audit - EU DK MAL Code

## SIGMADUR 550 BASE REDBROWN 6179

### Denmark MAL Code

#### Audit - MAL Code

EU Denmark MAL Code:- 4-3

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

Product is a Liquid

SIGMADUR 550 BASE REDBROWN 6179 - Components considered for the MAL Code calculation. {Denmark MAL Code}

BARIUM SULPHATE (36.398%)

CAS: 13462-86-7

Density: 4.4

Molecular Weight: 235.41

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

MAL Factor entered: 0. Limit: 0

FAD entered: 2; Lower Limit: 2

FAD 2 Quotient = 18.199

hydroxy acrylic resin (24.5682%)

CAS: SUB109728

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 = 24568.2

XYLENES (21.5596893102%)

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 = 2.156

FAD 1 Quotient = 107.798

Diiron trioxide (5.217%)

CAS: 1309-37-1

Density: 5.25

Relative Density: 5.18

Molecular Weight: 159.69

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 = 52.17

N-BUTYL ACETATE (5.0035475%)

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 = 5003.548

ETHYLBENZENE (3.84138449%)

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 = 0.384

N,N-1,6-HEXANEDIYLBIS (12-HYDROXY-OCTADECANEIMIDE) (1.531%)

CAS: 55349-01-4

Density: 1.06

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 = 15.31

2,6-DIMETHYLHEPTANONE (0.3828%)

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 = 382.8

2-BUTOXY ETHANOL (0.3828%)

Organic Solvent.

CAS: 111-76-2

Density: 0.9

Relative Density: 0.9

Molecular Weight: 118.18

Boiling Point: 171.25

Vapour Pressure: 0.75006

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 = 0.038

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (0.287%)

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 = 287

2,9 DIMETHYL QUINACRIDONE (0.19885%)

CAS: 980-26-7

Density: 1.45

Molecular Weight: 340.4

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 = 1.988

BLOCKED COPOLYMER (0.17235%)

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 = 1.724

cyclohexanone (0.16269%)

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 = 162.69

TOLUENE (0.0655885392%)

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

2-HYDROXYETHYL METHACRYLATE (0.0655152%)

CAS: 868-77-9

Density: 1.07

Molecular Weight: 130.16

Boiling Point: 213

Vapour Pressure: 0.06001

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 = 0.066

FAD 5 Quotient = 0.013

1-METHOXY-2-PROPYL ACETATE (0.047875%)

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 = 47.875

Siloxanes and Silicones, di-Me, [(triethoxysilyl)oxy]-terminated (0.02871%)

CAS: 67923-21-1

Density: 0

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

No MAL Factor calculated.

FAD: 1. (Default)

FAD 1 Quotient = 28.71

ALKOXYLATED BUTYL ETHER (0.0285194976%)

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 = 0.014

1-BUTANOL (0.014925%)

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 = 14.925

proprietary siloxane (0.0132672%)

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 = 13.267

ISOBUTYL ALCOHOL (0.009504%)

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 = 9.504

proprietary polyglycol (0.0080544%)

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 = 8.054

ALUMINUM SILICATE (0.00615%)

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: No limit specified. A very low value will be used.

FAD 1 Quotient = 0.062

BENZENE (0.0024648246%)

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 = 0.025

DIBUTYL TIN DILAURATE (0.0023668%)

CAS: 77-58-7

Density: 1.066

Relative Density: 1.1

Molecular Weight: 631.65

Boiling Point: 385

Vapour Pressure: 0.000000058

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 = 0.002

FAD 3 Quotient = 0.009

WATER (0.00199%)

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

ACETIC ACID (0.0004975%)

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

2-METHOXY-1-PROPYL ACETATE (0.00037917%)

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 (0.00037917%)

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 = 0.379

OCTAMETHYLCYCLOTETRAILOXANE (0.0001728%)

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 (0.0001728%)

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 = 0.002

CUMENE (0.000081304%)

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

COCONUT FATTY ACIDS (0.0000732%)

CAS: 61788-47-4

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 = 0.000

PROPYLENE OXIDE (0.0000014304%)

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 (0.0000001824%)

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 (0.0000001824%)

CAS: 7647-01-0

Density: 0.86

Molecular Weight: 36.46

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 (0.0000001344%)

Carcinogen.

CAS: 50-00-0

Density: 1.09

Relative Density: 0.812



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

ETHYLENE OXIDE (0.0000001344%)

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 (0.0000000768%)

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 ALCOHOL (0.0000000768%)

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 = 0.000  
FAD 3 Quotient = 0.000

METHYL CHLORIDE (0.0000000768%)

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 = 1.418. Entered value.

Figure-before-the dash = 4

BARIUM SULPHATE(@36.40%). MAL Factor = 0. Total increased by 36.40\*0=0. Running Total = 0  
XYLENES(@21.56%). MAL Factor = 46. Total increased by 21.56\*46=991.75. Running Total = 991.75  
Diiron trioxide (@5.22%). MAL Factor = 0. Total increased by 5.22\*0=0. Running Total = 991.75  
N-BUTYL ACETATE(@5.00%). MAL Factor = 14. Total increased by 5.00\*14=70.05. Running Total = 1061.80  
ETHYLBENZENE(@3.84%). MAL Factor = 46. Total increased by 3.84\*46=176.70. Running Total = 1238.50  
N,N-1,6-HEXANEDIYLBIS (12-HYDROXY-OCTADECANEIMIDE)(@1.53%). MAL Factor = 0. Total increased by 1.53\*0=0. Running Total = 1238.50  
2,6-DIMETHYLHEPTANONE(@0.38%). MAL Factor = 47. Total increased by 0.38\*47=17.99. Running Total = 1256.49  
2-BUTOXY ETHANOL(@0.38%). MAL Factor = 25. Total increased by 0.38\*25=9.57. Running Total = 1266.06  
2,9 DIMETHYL QUINACRIDONE(@0.20%). MAL Factor = 0. Total increased by 0.20\*0=0. Running Total = 1266.06  
BLOCKED COPOLYMER(@0.17%). MAL Factor = 0. Total increased by 0.17\*0=0. Running Total = 1266.06  
cyclohexanone(@0.16%). MAL Factor = 70. Total increased by 0.16\*70=11.39. Running Total = 1277.45  
TOLUENE(@0.07%). MAL Factor = 74. Total increased by 0.07\*74=4.85. Running Total = 1282.30  
2-HYDROXYETHYL METHACRYLATE(@0.07%). MAL Factor = 0. Total increased by 0.07\*0=0. Running Total = 1282.30  
1-METHOXY-2-PROPYL ACETATE(@0.05%). MAL Factor = 19. Total increased by 0.05\*19=0.91. Running Total = 1283.21  
ALKOXYLATED BUTYL ETHER(@0.03%). MAL Factor = 0. Total increased by 0.03\*0=0. Running Total = 1283.21  
1-BUTANOL(@0.01%). MAL Factor = 67. Total increased by 0.01\*67=1.00. Running Total = 1284.21  
ISOBUTYL ALCOHOL(@0.01%). MAL Factor = 67. Total increased by 0.01\*67=0.64. Running Total = 1284.85  
ALUMINUM SILICATE(@0.01%). MAL Factor = 0. Total increased by 0.01\*0=0. Running Total = 1284.85  
BENZENE(@0.00%). MAL Factor = 880. Total increased by 0.00\*880=2.17. Running Total = 1287.02  
DIBUTYL TIN DILAURATE(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0. Running Total = 1287.02  
WATER(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0. Running Total = 1287.02  
ACETIC ACID(@0.00%). MAL Factor = 400. Total increased by 0.00\*400=0.20. Running Total = 1287.22  
2-METHOXY-1-PROPYL ACETATE(@0.00%). MAL Factor = 181. Total increased by 0.00\*181=0.07. Running Total = 1287.29  
organotin compound(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0.00. Running Total = 1287.29  
OCTAMETHYLCYCLOTETRAILOXANE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1287.29  
Decamethylcyclopentasiloxane(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0. Running Total = 1287.29  
CUMENE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1287.29  
COCONUT FATTY ACIDS(@0.00%). MAL Factor = 0. Total increased by 0.00\*0=0. Running Total = 1287.29  
PROPYLENE OXIDE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1287.29  
ACETALDEHYDE(@0.00%). MAL Factor = 1. Total increased by 0.00\*1=0.00. Running Total = 1287.29  
HYDROCHLORIC ACID(@0.00%). MAL Factor = 2900. Total increased by 0.00\*2900=0.00. Running Total = 1287.29  
FORMALDEHYDE(@0.00%). MAL Factor = 2500. Total increased by 0.00\*2500=0.00. Running Total = 1287.29  
ETHYLENE OXIDE(@0.00%). MAL Factor = 11. Total increased by 0.00\*11=0.00. Running Total = 1287.29  
1,4-DIOXANE(@0.00%). MAL Factor = 390. Total increased by 0.00\*390=0.00. Running Total = 1287.29

METHYL ALCOHOL(@0.00%). MAL Factor = 54. Total increased by  $0.00 \times 54 = 0.00$ . Running Total = 1287.29  
METHYL CHLORIDE(@0.00%). MAL Factor = 476.19. Total increased by  $0.00 \times 476.19 = 0.00$ . Running Total = 1287.29  
Figure-before-the-dash calculated as 4. Via MAL Factor Total \* Density ( $1287.29 \times 1.418$ ) giving a MAL Number of 1825

MAL Number = Density (1.418) \* Sum (1287.29) = 1825

Figure-after-the-dash = 3. Calculated from component data.

BARIUM SULPHATE (@36.40%) Increasing Total for FAD2 by 18.199, giving 18.199

hydroxy acrylic resin (@24.57%) Increasing Total for FAD1 by 24568.2, giving 24568.2

XYLENES (@21.56%) Increasing Total for FAD3 by 2.15596893102, giving 2.15596893102

XYLENES (@21.56%) Increasing Total for FAD1 by 107.798446551, giving 24675.998446551

Diiron trioxide (@5.22%) Increasing Total for FAD1 by 52.17, giving 24728.168446551

N-BUTYL ACETATE (@5.00%) Increasing Total for FAD1 by 5003.5475, giving 29731.715946551

ETHYLBENZENE (@3.84%) Increasing Total for FAD3 by 0.384138449, giving 2.54010738002

N,N-1,6-HEXANEDIYLBIS (12-HYDROXY-OCTADECANEIMIDE) (@1.53%) Increasing Total for FAD1 by 15.31, giving 29747.025946551

2,6-DIMETHYLHEPTANONE (@0.38%) Increasing Total for FAD1 by 382.8, giving 30129.825946551

2-BUTOXY ETHANOL (@0.38%) Increasing Total for FAD3 by 0.03828, giving 2.57838738002

Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (@0.29%) Increasing Total for FAD1 by 287, giving 30416.825946551

2,9 DIMETHYL QUINACRIDONE (@0.20%) Increasing Total for FAD1 by 1.9885, giving 30418.814446551

BLOCKED COPOLYMER (@0.17%) Increasing Total for FAD1 by 1.7235, giving 30420.537946551

cyclohexanone (@0.16%) Increasing Total for FAD1 by 162.69, giving 30583.227946551

TOLUENE (@0.07%) Increasing Total for FAD3 by 0.00655885392, giving 2.58494623394

2-HYDROXYETHYL METHACRYLATE (@0.0655152%) Increasing Total for FAD5 by 0.01310304, giving 0.01310304

2-HYDROXYETHYL METHACRYLATE (@0.07%) Increasing Total for FAD3 by 0.0655152, giving 2.65046143394

1-METHOXY-2-PROPYL ACETATE (@0.05%) Increasing Total for FAD1 by 47.875, giving 30631.102946551

Siloxanes and Silicones, di-Me, [(triethoxysilyl)oxy]-terminated (@0.03%) Increasing Total for FAD1 by 28.71, giving 30659.812946551

ALKOXYLATED BUTYL ETHER (@0.03%) Increasing Total for FAD3 by 0.0142597488, giving 2.66472118274

1-BUTANOL (@0.01%) Increasing Total for FAD1 by 14.925, giving 30674.737946551

proprietary siloxane (@0.01%) Increasing Total for FAD1 by 13.2672, giving 30688.005146551

ISOBUTYL ALCOHOL (@0.01%) Increasing Total for FAD1 by 9.504, giving 30697.509146551

proprietary polyglycol (@0.01%) Increasing Total for FAD1 by 8.0544, giving 30705.563546551

ALUMINUM SILICATE (@0.01%) Increasing Total for FAD1 by 0.0615, giving 30705.625046551

BENZENE (@0.00%) Increasing Total for FAD6 by 0.024648246, giving 0.024648246

DIBUTYL TIN DILAURATE (@0.00%) Increasing Total for FAD6 by 0.0023668, giving 0.027015046

DIBUTYL TIN DILAURATE (@0.00%) Increasing Total for FAD3 by 0.0094672, giving 2.67418838274

ACETIC ACID (@0.00%) Increasing Total for FAD4 by 0.0000199, giving 0.0000199

ACETIC ACID (@0.00%) Increasing Total for FAD3 by 0.00004975, giving 2.67423813274

2-METHOXY-1-PROPYL ACETATE (@0.00%) Increasing Total for FAD6 by 0.00189585, giving 0.028910896

organotin compound (@0.00%) Increasing Total for FAD1 by 0.37917, giving 30706.004216551

OCTAMETHYLCYCLOTETRAILOXANE (@0.00%) Increasing Total for FAD3 by 0.0001728, giving 2.67441093274

Decamethylcyclopentasiloxane (@0.00%) Increasing Total for FAD1 by 0.001728, giving 30706.005944551

CUMENE (@0.00%) Increasing Total for FAD3 by 0.000081304, giving 2.67449223674

COCONUT FATTY ACIDS (@0.00%) Increasing Total for FAD3 by 0.0000366, giving 2.67452883674

PROPYLENE OXIDE (@0.00%) Increasing Total for FAD6 by 0.000007152, giving 0.028918048

ACETALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.000001824, giving 2.67453066074

HYDROCHLORIC ACID (@0.00%) Increasing Total for FAD4 by 0.0000003648, giving 0.00001993648

HYDROCHLORIC ACID (@0.00%) Increasing Total for FAD3 by 0.000000456, giving 2.67453111674

FORMALDEHYDE (@0.00%) Increasing Total for FAD6 by 0.000001344, giving 0.0289181824

FORMALDEHYDE (@0.00%) Increasing Total for FAD3 by 0.000001344, giving 2.67453246074

ETHYLENE OXIDE (@0.00%) Increasing Total for FAD6 by 0.000000672, giving 0.0289188544  
1,4-DIOXANE (@0.00%) Increasing Total for FAD6 by 0.0000000768, giving 0.02891886208  
1,4-DIOXANE (@0.00%) Increasing Total for FAD3 by 0.000000768, giving 2.67453322874  
METHYL ALCOHOL (@0.00%) Increasing Total for FAD6 by 0.0000000384, giving 0.02891886592  
METHYL ALCOHOL (@0.00%) Increasing Total for FAD3 by 0.000000768, giving 2.67453330554  
METHYL CHLORIDE (@0.00%) Increasing Total for FAD1 by 0.0000768, giving 30706.006021351  
Figure-after-the-dash =3. Total of components with FAD=3 is >=1.

Low Boiling Liquid = False.

PROPYLENE OXIDE (@0.00%) Total increased by  $0.00 \times 1/100 = 0.00$ . Running Total = 0.00  
ACETALDEHYDE (@0.00%) Total increased by  $0.00 \times 1/100 = 0.00$ . Running Total = 0.00  
ETHYLENE OXIDE (@0.00%) Total increased by  $0.00 \times 11/100 = 0.00$ . Running Total = 0.00  
METHYL ALCOHOL (@0.00%) Total increased by  $0.00 \times 54/100 = 0.00$ . Running Total = 0.00  
METHYL CHLORIDE (@0.00%) Total increased by  $0.00 \times 476.19/100 = 0.00$ . Running Total = 0.00  
Density \* (Sum of components Concentration \* MALFactor/LBLFactor) = 0

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** : 4-3  
**MAL Number** : 1825.37  
**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: 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, spray-cabin 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.

**Protection based on R-F-U MAL** : Not available.

Not available.

Not available.