

# Audit - EU DK MAL Code

## SIGMAGUARD 603 HARDENER

### Denmark MAL Code

#### Audit - MAL Code

EU Denmark MAL Code:- 00-5

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

Product is a Liquid

SIGMAGUARD 603 HARDENER - Components considered for the MAL Code calculation.

polyoxy propylene triamine (51.87%) {Denmark MAL Code}

CAS: 39423513

Density: 0.966

Molecular Weight: 440

Vapour Pressure: 5.12

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

MAL Factor entered: 0. Limit: 0

FAD entered: 4; Lower Limit: 1

FAD 4 Quotient = 51.87

Isophorone diamine (20.5%) {Denmark MAL Code}

CAS: 2855132

Density: 0.92

Relative Density: 0.92

Molecular Weight: 170.34

Boiling Point: 252.9

Vapour Pressure: 0.01

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

MAL Factor entered: 0. Limit: 0

FAD entered: 5; Lower Limit: 1

FAD 5 Quotient = 20.5

BENZYL ALCOHOL (13.93%) {Denmark MAL Code}

CAS: 100516

Density: 1.05

Relative Density: 1.04

Molecular Weight: 108.14

Boiling Point: 205.3

Vapour Pressure: 0.0525

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 = 13930

EPOXY AMINE RESIN (7.5%) {Denmark MAL Code}

CAS: SUB114180

Density: 0

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

No MAL Factor calculated.  
FAD:5. (Skin Sens)  
FAD 5 Quotient = 7500  
2;4;6 TRIS (DIMETHYLAMINOMETHYL) PHENOL (4%) {Denmark MAL Code}  
CAS: 90722  
Density: 0.971  
Molecular Weight: 265.45  
Boiling Point: 341  
Vapour Pressure: 0.06  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
MAL Factor entered: 0. Limit: 0  
FAD entered: 3; Lower Limit: 2  
FAD 3 Quotient = 2

Salicylic acid (1.996%) {Denmark MAL Code}  
CAS: 69727  
Density: 1.443  
Relative Density: 1.4  
Molecular Weight: 138.13  
Vapour Pressure: 0.000081757  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
MAL Factor entered: 0. Limit: 0  
FAD entered: 3; Lower Limit: 1  
FAD 3 Quotient = 1.996

WATER (0.148%) {Denmark MAL Code}  
CAS: 7732185  
Density: 1  
Molecular Weight: 18.02  
Boiling Point: 100  
Vapour Pressure: 23.8  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
MAL Factor entered: 0. Limit: 0  
FAD entered: 0; Lower Limit: 0

BENZALDEHYDE (0.028%) {Denmark MAL Code}  
CAS: 100527  
Density: 1.044  
Relative Density: 1.05  
Molecular Weight: 106.13  
Boiling Point: 179  
No LBL Factor entered or estimated from CAS Number or Boiling Point.  
No MAL Factor calculated.  
FAD: 1. (Default)  
FAD 1 Quotient = 28

BENZYL ETHER (0.028%) {Denmark MAL Code}  
CAS: 103504  
Density: 1.036  
Relative Density: 1.043  
Molecular Weight: 198.26  
Boiling Point: 297

Vapour Pressure: 0

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

R Phrases: N;R51/53

MAL Factor from Sub-Annex 2: 0

FAD: 1. (Default)

FAD 1 Quotient = 28

Density = 0.98. Entered value.

Figure-before-the dash = Empty

polyoxy propylene triamine(@51.87%). MAL Factor = 0. Total increased by 51.87\*0=0. Running Total = 0

Isophorone diamine(@20.5%). MAL Factor = 0. Total increased by 20.5\*0=0. Running Total = 0

BENZYL ALCOHOL(@13.93%). MAL Factor = 0. Total increased by 13.93\*0=0. Running Total = 0

2;4;6 TRIS (DIMETHYLAMINOMETHYL) PHENOL(@4%). MAL Factor = 0. Total increased by 4\*0=0. Running Total = 0

Salicylic acid(@2.00%). MAL Factor = 0. Total increased by 2.00\*0=0. Running Total = 0

WATER(@0.15%). MAL Factor = 0. Total increased by 0.15\*0=0. Running Total = 0

BENZYL ETHER(@0.03%). MAL Factor = 0. Total increased by 0.03\*0=0.00. Running Total = 0.00

Figure-before-the-dash calculated as Empty. Via MAL Factor Total \* Density (0.00 \* 0.98) giving a MAL Number of 0

MAL Number = Density (0.98) \* Sum (0.00) = 0

Figure-after-the-dash = 5. Calculated from component data.

polyoxy propylene triamine (@51.87%) Increasing Total for FAD4 by 51.87, giving 51.87

Isophorone diamine (@20.5%) Increasing Total for FAD5 by 20.5, giving 20.5

BENZYL ALCOHOL (@13.93%) Increasing Total for FAD1 by 13930, giving 13930

EPOXY AMINE RESIN (@7.5%) Increasing Total for FAD5 by 7500, giving 7520.5

2;4;6 TRIS (DIMETHYLAMINOMETHYL) PHENOL (@4%) Increasing Total for FAD3 by 2, giving 2

Salicylic acid (@2.00%) Increasing Total for FAD3 by 1.996, giving 3.996

BENZALDEHYDE (@0.03%) Increasing Total for FAD1 by 28, giving 13958

BENZYL ETHER (@0.03%) Increasing Total for FAD1 by 28, giving 13986

Figure-after-the-dash =5. Total of components with FAD=5 is >=1.

Low Boiling Liquid = Empty. Insufficient information available.

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** : 00-5

**MAL Number** : 0

**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: 00-5

**Application:** When using scraper or knife, brush, roller etc. for pre- and post-treatments in a spray booth where the operator is outside the spray zone and when working in similar new\* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new\* booths and cabins with non-atomizing guns. During downtimes, cleaning and repair in closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. During non-atomising 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 in cabins or booths of the existing\* facility type, if the operator is 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.

- Protective clothing must be worn.

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

- Air-supplied full mask and protective clothing must be worn.

During all spraying where atomisation 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, protective clothing 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.