

# Audit - EU DK MAL Code

## SIGMAPRIME 700 BASE GREY

MAL Code MAL Protection	Product as is	Ready-for-use mixture
	<p data-bbox="311 284 353 311">3-6</p> <p data-bbox="311 325 1814 384"><b>According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:</b></p> <p data-bbox="311 421 1814 539"><b>General:</b> 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.</p> <p data-bbox="311 571 1814 635">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.</p>	Not applicable. Not applicable.
	<p data-bbox="311 715 488 742">MAL-code: 3-6</p> <p data-bbox="311 746 1814 837"><b>Application:</b> 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.</p> <p data-bbox="311 869 719 896">- Protective clothing must be worn.</p> <p data-bbox="311 928 1814 1050">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. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.</p> <p data-bbox="311 1082 1216 1109">- Air-supplied half mask, protective clothing and eye protection must be worn.</p> <p data-bbox="311 1141 1149 1168">When spraying in new* booths if the operator is outside the spray zone.</p> <p data-bbox="311 1200 987 1227">- Air-supplied half mask and eye protection must be worn.</p> <p data-bbox="311 1259 1814 1327">When spraying in existing* spray 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.</p> <p data-bbox="311 1359 1028 1386">- Air-supplied full mask and protective clothing must be worn.</p> <p data-bbox="311 1418 1814 1482">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.</p> <p data-bbox="311 1514 1099 1541">- Air-supplied full mask, protective clothing and hood must be worn.</p>	Not applicable.

Not applicable.

**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 applicable.

Not applicable.

Low Boiling  
Liquid  
MAL Number  
Audit (Textual)

1269.4

Not applicable.

36

Not applicable.

Figure-before-dash (from MAL Number) = 3

800 < MAL Number [1269.4] ≤ 1600

MAL Number = density \* Σ[Conc(i) \* MAL Factor(i)] = 1.451 \* 874.8 = 1269.4

Density (from Density (g/m<sup>3</sup>) data entry) = 1.451

Σ[Conc(i) \* MAL Factor(i)] = 874.8

[XYLENES] Conc \* MAL Factor = 11.05% \* 46 = 508.5

MAL Factor entered against range: '0 to 100' = 46

[Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)] Conc \* MAL Factor = 2.283% \* 14 = 31.97

MAL Factor entered against range: '0 to 100' = 14

[PROPYLENE GLYCOL MONOMETHYL ETHER] Conc \* MAL Factor = 2.007% \* 28 = 56.19

MAL Factor entered against range: '0 to 100' = 28

[ETHYLBENZENE] Conc \* MAL Factor = 1.980% \* 46 = 91.10

MAL Factor entered against range: '0 to 100' = 46

[ISOBUTYL ALCOHOL] Conc \* MAL Factor = 1.761% \* 67 = 118.0

MAL Factor entered against range: '0 to 100' = 67

[hydrocarbons C10 >1% naphthalene] Conc \* MAL Factor = 0.544% \* 25 = 13.6

MAL Factor entered against range: '0 to 100' = 25

[2,6-DIMETHYLHEPTANONE] Conc \* MAL Factor = 0.2590% \* 47 = 12.17

MAL Factor entered against range: '0 to 100' = 47

[TOLUENE] Conc \* MAL Factor = 0.09333% \* 74 = 6.906

MAL Factor entered against range: '0 to 100' = 74

[FORMALDEHYDE] Conc \* MAL Factor = 0.006525% \* 2500 = 16.31

MAL Factor entered against range: '0 to 0.1' = 2500

[2-METHOXY-1-PROPANOL] Conc \* MAL Factor = 0.005846% \* 267 = 1.561

MAL Factor entered against range: '0 to 100' = 267

[PHENOL] Conc \* MAL Factor = 0.003262% \* 5000 = 16.31

From DK (Working Environment Authority) OELs: OELs in mg/m<sup>3</sup> and ppm available: 2 \* 10000 / OEL in mg/m<sup>3</sup> = 2 \* 10000 / 4 = 5000

Available value in mg/m<sup>3</sup> = 4

Available value in ppm = 1

Warning: ERCF of 2 used. Contact Authorities for MAL Factor.

[ALPHA-METHYLSTYRENE / ISOPROPENYLBENZENE] Conc \* MAL Factor = 0.003262% \* 58 = 0.1892

MAL Factor entered against range: '0 to 100' = 58

[BENZENE] Conc \* MAL Factor = 0.001983% \* 880 = 1.745

MAL Factor entered against range: '0 to 100' = 880

[METHYL ALCOHOL] Conc \* MAL Factor = 0.0002277% \* 54 = 0.01230

MAL Factor entered against range: '0 to 100' = 54

[ALLYL GLYCIDYL ETHER] Conc \* MAL Factor = 0.0002277% \* 909.1 = 0.207

From DK (Working Environment Authority) OELs: OELs in mg/m<sup>3</sup> and ppm available: 2 \* 10000 / OEL in mg/m<sup>3</sup> = 2 \* 10000 / 22 = 909.1

Available value in mg/m<sup>3</sup> = 22

Available value in ppm = 5

Warning: ERCF of 2 used. Contact Authorities for MAL Factor.

[ACETIC ACID] Conc \* MAL Factor = 0.0002016% \* 400 = 0.08064

MAL Factor entered against range: '0 to 100' = 400

Ingredients with MAL factor of 0 [did not contribute] {Denmark MAL Code}

Talc, non-asbestos form (22.24%)  
MAL Factor entered against range: '0 to 100' = 0  
EPOXY RESIN (AVERAGE MOLECULAR WEIGHT >700 - <1100) (19.73%)  
MAL Factor entered against range: '0 to 100' = 0  
QUARTZ (>10 microns) (19.57%)  
MAL Factor entered against range: '0 to 100' = 0  
ALUMINUM POWDER (4.175%)  
MAL Factor entered against range: '0 to 100' = 0  
Phenol, methylstyrenated (3.255%)  
MAL Factor entered against range: '0 to 100' = 0  
QUARTZ (<10 microns) (2.198%)  
MAL Factor entered against range: '0 to 100' = 0  
oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (2.175%)  
Default assumption [non-volatile] = 0  
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (1.415%)  
From US (ACGIH) OELs: Product is assumed to be non-volatile, due to an OEL in mg/m<sup>3</sup> being available, and no ppm OEL being available] = 0  
Available value in mg/m<sup>3</sup> = 3  
CASHEW NUTSHELL LIQUID (1.305%)  
MAL Factor entered against range: '0 to 100' = 0  
urea, polymer with formaldehyde, isobutylated (1.264%)  
MAL Factor entered against range: '0 to 100' = 0  
TITANIUM DIOXIDE (1.028%)  
MAL Factor entered against range: '0 to 100' = 0  
IRON OXIDE BLACK (0.4864%)  
MAL Factor entered against range: '0 to 100' = 0  
WATER (0.3412%)  
MAL Factor entered against range: '0 to 100' = 0  
[3-(2,3-epoxypropoxy)propyl]trimethoxysilane (0.2525%)  
Default assumption [non-volatile] = 0  
CASTOR OIL, HYDROGENATED (0.1178%)  
MAL Factor entered against range: '0 to 100' = 0  
non-hazardous polymer (0.1065%)  
Default assumption [non-volatile] = 0  
ALUMINUM OXIDE (0.06949%)  
MAL Factor entered against range: '0 to 100' = 0  
FATTY ACIDS (0.06524%)  
Default assumption [non-volatile] = 0  
4,6-DIMETHYL-2-HEPTANONE (0.06474%)  
Default assumption [non-volatile] = 0  
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine (0.04059%)  
Default assumption [non-volatile] = 0  
ALUMINUM HYDROXIDE (0.03804%)  
MAL Factor entered against range: '0 to 100' = 0  
CALCIUM OXYDE (0.02316%)  
MAL Factor entered against range: '0 to 100' = 0  
SILICA (0.01087%)  
MAL Factor entered against range: '0 to 100' = 0  
ZIRCONIUM OXIDE (0.005435%)  
MAL Factor entered against range: '0 to 100' = 0  
TRIMETHYLOLPROPANE (0.004892%)  
MAL Factor entered against range: '0 to 100' = 0  
esterification reaction product of a hydroxy fatty acid and a hydroxy amide (0.004564%)  
Default assumption [non-volatile] = 0  
4,4-ISOPROPYLIDENEDIPHENOL (0.002605%)  
MAL Factor entered against range: '0 to 100' = 0  
CHLORITE-GROUP MINERALS (0.002316%)  
MAL Factor entered against range: '0 to 100' = 0  
DOLomite (0.002316%)  
MAL Factor entered against range: '0 to 100' = 0  
MAGNESIUM CARBONATE (0.002316%)  
MAL Factor entered against range: '0 to 100' = 0  
fluorinated polyalkyl silicones (0.002275%)  
Default assumption [non-volatile] = 0  
OCTAMETHYLCYCLOTETRASILOXANE (0.0000652%)  
MAL Factor entered against range: '0 to 100' = 0

Figure-after-dash (Ingredient(s) above the cut-off on their own) = 6

Ingredients above the Figure-after-dash 6 concentration limit on their own {Denmark MAL Code}

oxirane, mono[(C12-14-alkyloxy)methyl] derivs. (2.175%)

Ingredient concentration is above the limit [0.1%]

Figure-after-dash (CLP hazard) = 6

GHS Status - EU

Reproductive toxicity

Calculation intermediates involved in final hazard assignment

Reproductive toxicity - Fertility - Category 1B - Effect On: Fertility - From 'Entered data'

Entered data - [EU] [99] [User]