

Audit - EU DK MAL Code

SIGMACOVER 520 US GREY 5177 BASE

	Product as is	Ready-for-use mixture
MAL Code	5-5	Not applicable.
MAL Protection	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: 5-5 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. - Protective clothing 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. When spraying in existing* spray booths, if the operator is outside 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. 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 protective clothing must be worn. When spraying in new* booths if the operator is outside 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, protective clothing and hood must be worn.	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.

13563.9

Not applicable.

5/5

Not applicable.

Figure-before-dash (from MAL Number) = 5

3200 < MAL Number [13563.9]

MAL Number = density * $\Sigma[\text{Conc}(i) * \text{MAL Factor}(i)] = 1.557 * 8711.6 = 13563.9$

Density (from Density (g/m³) data entry) = 1.557

$\Sigma[\text{Conc}(i) * \text{MAL Factor}(i)] = 8711.6$

[Hydrocarbons, C9, aromatics] Conc * MAL Factor = 11.78% * 58 = 683.5

MAL Factor entered against range: '>0' = 58

[Phenol, isobutylenated methylstyrenated] Conc * MAL Factor = 7.723% * 1000 = 7723

Found via vapor pressure and EU CLP classification = 1000

Vapor Pressure $\geq$ 0.1 mm Hg

Vapor Pressure (mm Hg) from entered value = 0.9

GHS Status - EU

Skin corrosion/irritation - Category 2 - From 'Entered data'

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

[HEPTAN-2-ONE] Conc * MAL Factor = 7.091% * 43 = 304.9

MAL Factor entered against range: '>0' = 43

[4-METHYLPENTAN-2-ONE / METHYL ISOBUTYL KETONE] Conc * MAL Factor = 0.002128% * 48 = 0.1021

MAL Factor entered against range: '>0' = 48

[EPICHLOROHYDRIN] Conc * MAL Factor = 0.00001620% * 5300 = 0.08584

MAL Factor entered against range: '>0' = 5300

Ingredients with MAL factor of 0 [did not contribute] {Denmark MAL Code} (73.3999838040%)

Talc, non-asbestos form (50.41%)

MAL Factor entered against range: '>0' = 0

Bisphenol A diglycidyl ether (16.20%)

MAL Factor entered against range: '>0' = 0

TITANIUM DIOXIDE (3.688%)

MAL Factor entered against range: '>0' = 0

12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (0.7905%)

From US (ACGIH) OELs: Product is assumed to be non-volatile, due to an OEL in mg/m³ being available, and no ppm OEL being available] = 0

Available value in mg/m³ = 3

DOLOMITE (0.5639%)

MAL Factor entered against range: '>0' = 0

QUARTZ (<10 microns) (0.5192%)

MAL Factor entered against range: '>0' = 0

CHLORITE-GROUP MINERALS (0.4756%)

MAL Factor entered against range: '>0' = 0

MAGNESIUM CARBONATE (0.4756%)

MAL Factor entered against range: '>0' = 0

ALUMINUM HYDROXIDE (0.1365%)

MAL Factor entered against range: '>0' = 0

non-hazardous polymer (0.0595%)

Default assumption [non-volatile] = 0

SILICA (0.03901%)

MAL Factor entered against range: '>0' = 0

ZIRCONIUM OXIDE (0.01950%)

MAL Factor entered against range: '>0' = 0
 TRIMETHYLOLPROPANE (0.01755%)
 MAL Factor entered against range: '>0' = 0
 CARBON BLACK (0.004%)
 MAL Factor entered against range: '>0' = 0
 MANGANESE (0.003590%)
 MAL Factor entered against range: '>0' = 0
 NICKEL (0.0008701%)
 MAL Factor entered against range: '>0' = 0
 BARIUM (0.0004279%)
 From US (ACGIH) OELs: Product is assumed to be non-volatile, due to an OEL in mg/m³ being available, and no ppm OEL being available] = 0
 Available value in mg/m³ = 0.5
 CHROMIUM (0.0001949%)
 MAL Factor entered against range: '>0' = 0
 VANADIUM (0.0001759%)
 Default assumption [non-volatile] = 0
 4,4-ISOPROPYLIDENEDIPHENOL (0.00007936%)
 MAL Factor entered against range: '>0' = 0
 STRONTIUM (0.00005230%)
 Default assumption [non-volatile] = 0
 COPPER (0.00009509%)
 From DK (Working Environment Authority) OELs: Product is assumed to be non-volatile, due to an OEL in mg/m³ being available, and no ppm OEL being available]
 = 0
 Available value in mg/m³ = 1
 Figure-after-dash (Ingredient(s) above the cut-off on their own) = 5
 Ingredients above the Figure-after-dash 5 concentration limit on their own {Denmark MAL Code} (23.9189044436%)
 Bisphenol A diglycidyl ether (16.20%)
 Ingredient concentration is above the limit [1%]
 Phenol, isobutyleneated methylstyrenated (7.723%)
 Ingredient concentration is above the limit [1%]
 Figure-after-dash (CLP hazard) = 5
 GHS Status - EU
 Skin sensitization - Category 1A - From 'Entered data'
 Entered data - [EU] [99] [User]
 Stricter figure-after-dash numbers that are not available because $\Sigma [\text{ing conc} / \text{ing limit}] < 1$
 Figure-after-dash 6 calculated ratio: $\Sigma [\text{ing conc} / \text{ing limit}] = 0.05242049202$
 QUARTZ (<10 microns): $\text{Ing conc} / \text{Ing limit} = 0.5192 / 10 = 0.05192$
 Minimum value of concentration limit associated with figure-after-dash 6 = 10
 CARBON BLACK: $\text{Ing conc} / \text{Ing limit} = 0.004 / 25 = 0.00016$
 Minimum value of concentration limit associated with figure-after-dash 6 = 25
 NICKEL: $\text{Ing conc} / \text{Ing limit} = 0.0008701 / 5 = 0.0001740$
 Minimum value of concentration limit associated with figure-after-dash 6 = 5
 EPICHLOROHYDRIN: $\text{Ing conc} / \text{Ing limit} = 0.00001620 / 0.1 = 0.0001620$
 Minimum value of concentration limit associated with figure-after-dash 6 = 0.1