

# Audit - EU DK MAL Code

## PPG VIKOTE 56 GREY 5177

| MAL Code       | Product as is   | Ready-for-use mixture              |
|----------------|---|------------------------------------|
| MAL Protection | <p data-bbox="315 284 353 308">5-3</p> <p data-bbox="315 325 1816 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="315 421 1816 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="315 572 1816 632">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> <p data-bbox="315 716 488 740">MAL-code: 5-3</p> <p data-bbox="315 748 1816 836"><b>Application:</b> 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.</p> <p data-bbox="315 869 757 893">- Air-supplied full mask must be worn.</p> <p data-bbox="315 932 1816 1019">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.</p> <p data-bbox="315 1053 920 1077">- Air-supplied full mask and coveralls must be worn.</p> <p data-bbox="315 1115 1267 1139">When spraying in existing* spray booths, if the operator is outside the spray zone.</p> <p data-bbox="315 1177 1066 1201">- Air-supplied full mask, arm protectors and apron must be worn.</p> <p data-bbox="315 1240 1816 1299">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="315 1332 992 1356">- Air-supplied full mask, coveralls and hood must be worn.</p> | Not applicable.<br>Not applicable. |
|                |   | 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)

3290.7

Not applicable.

5/3

Not applicable.

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

3200 < MAL Number [3290.7]

MAL Number = density \*  $\Sigma$ [Conc(i) \* MAL Factor(i)] = 1.012 \* 3251.7 = 3290.7

Density (from Density (g/m<sup>3</sup>) data entry) = 1.012

$\Sigma$ [Conc(i) \* MAL Factor(i)] = 3251.7

[Hydrocarbons, C9, aromatics ] Conc \* MAL Factor = 41.53% \* 58 = 2408.5

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

[XYLENES] Conc \* MAL Factor = 13.78% \* 46 = 633.9

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

[ETHYLBENZENE] Conc \* MAL Factor = 3.674% \* 46 = 169.0

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

[cyclohexanone] Conc \* MAL Factor = 0.3972% \* 70 = 27.80

MAL Factor entered against range: '0 to 100' = 70

[ETHYL ALCOHOL] Conc \* MAL Factor = 0.2850% \* 7 = 1.995

MAL Factor entered against range: '0 to 100' = 7

[TOLUENE] Conc \* MAL Factor = 0.07050% \* 74 = 5.217

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

[1-METHOXY-2-PROPYL ACETATE] Conc \* MAL Factor = 0.03790% \* 19 = 0.7200

MAL Factor entered against range: '0 to 100' = 19

[N-BUTYL ACETATE] Conc \* MAL Factor = 0.0354% \* 14 = 0.4956

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

[METHYL ALCOHOL] Conc \* MAL Factor = 0.015% \* 54 = 0.81

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

[BENZENE] Conc \* MAL Factor = 0.002606% \* 880 = 2.293

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

[CUMENE] Conc \* MAL Factor = 0.0009% \* 1000 = 0.9

MAL Factor entered against range: '0 to 100' = 1000

[2-METHOXY-1-PROPYL ACETATE] Conc \* MAL Factor = 0.000297% \* 181 = 0.05376

MAL Factor entered against range: '0 to 100' = 181

[1-BUTANOL] Conc \* MAL Factor = 0.000297% \* 67 = 0.01990

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

[ACETIC ACID] Conc \* MAL Factor = 0.0000045% \* 400 = 0.00018

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

[ACETONE] Conc \* MAL Factor = 0.0000045% \* 23 = 0.00001035

MAL Factor entered against range: '0 to 100' = 23

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

acrylic resin (27.03%)

Default assumption [non-volatile] = 0

TITANIUM DIOXIDE (6.701%)

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

C14-C17 CHLORINATED HYDROCARBONS (3.8%)

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

12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (1.023%)

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

QUATERN.AM.CPS,BIS(HYDROGEN.TALLOW ALKYL)DIMET.-.BENTONITE (0.5821%)  
 MAL Factor entered against range: '0 to 100' = 0  
 CARBON BLACK (0.254%)  
 MAL Factor entered against range: '0 to 100' = 0  
 ALUMINUM HYDROXIDE (0.252%)  
 MAL Factor entered against range: '0 to 100' = 0  
 modified polyurethane (0.135%)  
 Default assumption [non-volatile] = 0  
 non-hazardous polymer (0.077%)  
 Default assumption [non-volatile] = 0  
 TRIMETHYLOLPROPANE (0.072%)  
 MAL Factor entered against range: '0 to 100' = 0  
 TITANIUM DIOXIDE (<10 microns) (0.06715%)  
 MAL Factor entered against range: '0 to 100' = 0  
 IRON HYDROXIDE OXIDE (0.053%)  
 MAL Factor entered against range: '0 to 100' = 0  
 SILICA (0.0504%)  
 MAL Factor entered against range: '0 to 100' = 0  
 WATER (0.03601%)  
 MAL Factor entered against range: '0 to 100' = 0  
 ZIRCONIUM OXIDE (0.0216%)  
 MAL Factor entered against range: '0 to 100' = 0  
 QUARTZ (>10 microns) (0.012%)  
 MAL Factor entered against range: '0 to 100' = 0  
 QUARTZ (<10 microns) (0.00594%)  
 MAL Factor entered against range: '0 to 100' = 0  
 Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl (0.002800%)  
 Default assumption [non-volatile] = 0  
 dibutyltin dilaurate (0.000027%)  
 MAL Factor entered against range: '0 to 100' = 0  
 organotin compound (0.000027%)  
 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> = 0.1  
 DENATONIUM BENZOATE (0.00000285%)  
 Default assumption [non-volatile] = 0  
 OCTAMETHYLCYCLOTETRASILOXANE (0.0000004%)  
 MAL Factor entered against range: '0 to 100' = 0  
 Figure-after-dash (Ingredient(s) above the cut-off on their own) = 3  
 Ingredients above the Figure-after-dash 3 concentration limit on their own {Denmark MAL Code}  
 XYLENES (13.78%)  
 Ingredient concentration is above the limit [10%]  
 12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (1.023%)  
 Ingredient concentration is above the limit [1%]  
 Figure-after-dash (CLP hazard) = 3  
 GHS Status - EU  
 Acute toxicity - Inhalation (overall) - Category 4  
 Acute toxicity - Inhalation (dust/mist) - Category 4 - 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:  $\Sigma [\text{ing conc} / \text{ing limit}] = 0.039076$   
 CARBON BLACK:  $\text{Ing conc} / \text{Ing limit} = 0.254 / 25 = 0.01016$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 25  
 METHYL ALCOHOL:  $\text{Ing conc} / \text{Ing limit} = 0.015 / 20 = 0.00075$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 20  
 QUARTZ (<10 microns):  $\text{Ing conc} / \text{Ing limit} = 0.00594 / 10 = 0.000594$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 10  
 BENZENE:  $\text{Ing conc} / \text{Ing limit} = 0.002606 / 0.1 = 0.02606$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 0.1  
 2-METHOXY-1-PROPYL ACETATE:  $\text{Ing conc} / \text{Ing limit} = 0.000297 / 0.2 = 0.001485$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 0.2  
 dibutyltin dilaurate:  $\text{Ing conc} / \text{Ing limit} = 0.000027 / 1 = 0.000027$   
 Minimum value of concentration limit associated with figure-after-dash 6 = 1  
 Figure-after-dash 4 calculated ratio:  $\Sigma [\text{ing conc} / \text{ing limit}] = 0.00000018$   
 ACETIC ACID:  $\text{Ing conc} / \text{Ing limit} = 0.00000045 / 25 = 0.00000018$   
 Minimum value of concentration limit associated with figure-after-dash 4 = 25