Audit - EU DK MAL Code

PPG VIKOTE 56 WHITE 7000

MAL Code MAL Protection	Product as is 5-3 According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:	Ready-for-use mixture Not applicable. Not applicable.
	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: 5-3 Application: 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.	Not applicable.
	- Air-supplied full mask 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. 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 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.	

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.
3 ∕228.4	Not applicable.
Figure-before-dash (from MAL Number) = 5	
3200 < MAL Number [3228.4] MAL Number = density * Σ[Conc(i) * MAL Factor(i)] = 1.1 * 2934.9 = 3228.4	
Density (from Density (g/m³) data entry) = 1.1 Σ[Conc(i) * MAL Factor(i)] = 2934.9	
[Hydrocarbons, C9, aromatics] Conc * MAL Factor = 38.25% * 58 = 2218.7	
MAL Factor entered against range: '0 to 100' = 58 [XYLENES] Conc * MAL Factor = 12.00% * 46 = 551.9	
MAL Factor entered against range: '0 to 100' = 46	
[ETHYLBENZENE] Conc * MAL Factor = 3.200% * 46 = 147.2 MAL Factor entered against range: '0 to 100' = 46	
[ETHYL ALCOHOL] Conc * MAL Factor = 0.2850% * 7 = 1.995 MAL Factor entered against range: '0 to 100' = 7	
[cyclohexanone] Conc * MAL Factor = 0.0993% * 70 = 6.951	
MAL Factor entered against range: '0 to 100' = 70 [TOLUENE] Conc * MAL Factor = 0.06118% * 74 = 4.527	
MAL Factor entered against range: '0 to 100' = 74	
[METHYL ALCOHOL] Conc * MAL Factor = 0.015% * 54 = 0.81 MAL Factor entered against range: '0 to 100' = 54	
[1-METHOXY-2-PROPYL ACETATE] Conc * MAL Factor = 0.01263% * 19 = 0.2400 MAL Factor entered against range: '0 to 100' = 19	
[N-BUTYL ACETATE] Conc * MAL Factor = 0.0118% * 14 = 0.1652	
MAL Factor entered against range: '0 to 100' = 14 [BENZENE] Conc * MAL Factor = 0.002272% * 880 = 1.999	
MAL Factor entered against range: '0 to 100' = 880	
[CUMENE] Conc * MAL Factor = 0.0003% * 1000 = 0.3 MAL Factor entered against range: '0 to 100' = 1000	
[2-METHOXY-1-PROPYL ACETATE] Conc * MAL Factor = 0.000099% * 181 = 0.01792	
MAL Factor entered against range: '0 to 100' = 181 [1-BUTANOL] Conc * MAL Factor = 0.000099% * 67 = 0.006633	
MAL Factor entered against range: '0 to 100' = 67 [ACETIC ACID] Conc * MAL Factor = 0.00000045% * 400 = 0.00018	
MAL Factor entered against range: '0 to 100' = 400	
[ACETONE] Conc * MAL Factor = 0.00000045% * 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 (23.61%) Default assumption [non-volatile] = 0	
TITANIUM DIOXIDE (15.60%) MAL Factor entered against range: '0 to 100' = 0	
C14-C17 CHLORINATED HYDROCARBONS (3.2%)	
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 ³ being available, and no ppm OEL being available] = 0	
Available value in mg/m³ = 3	

Low Boiling Liquid MAL Number Audit (Textual)

BARIUM SULFATE (0.9954%) MAL Factor entered against range: '0 to 100' = 0QUATERN, AM, CPS, BIS(HYDROGEN, TALLOW, ALKYL) DIMET, -, BENTONITE (0.5821%) MAL Factor entered against range: '0 to 100' = 0ALUMINUM HYDROXIDE (0.5775%) MAL Factor entered against range: '0 to 100' = 0 SILICA (0.165%) MAL Factor entered against range: '0 to 100' = 0 ZIRCONIUM OXIDE (0.0825%) MAL Factor entered against range: '0 to 100' = 0 non-hazardous polymer (0.077%)Default assumption [non-volatile] = 0 TRIMETHYLOLPROPANE (0.07425%) MAL Factor entered against range: '0 to 100' = 0modified polyurethane (0.045%) Default assumption [non-volatile] = 0 QUARTZ (>10 microns) (0.012%) MAL Factor entered against range: '0 to 100' = 0QUARTZ (<10 microns) (0.00594%) MAL Factor entered against range: '0 to 100' = 0WATER (0.002008%) MAL Factor entered against range: '0 to 100' = 0IRON OXIDE (0.0016%) MAL Factor entered against range: '0 to 100' = 0 SILICA CRISTOBALLITE (>10 microns) (0.001%) MAL Factor entered against range: '0 to 100' = 0Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl (0.0006999%) Default assumption [non-volatile] = 0 dibutyltin dilaurate (0.000009%) MAL Factor entered against range: '0 to 100' = 0organotin compound (0.000009%) 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 $mg/m^3 = 0.1$ DENATONIUM BENZOATE (0.00000285%) Default assumption [non-volatile] = 0 OCTAMETHYLCYCLOTETRASILOXANE (0.0000001%) MAL Factor entered against range: '0 to 100' = 0Figure-after-dash (Ingredient(s) above the cut-off on their own) = 3Ingredients above the Figure-after-dash 3 concentration limit on their own {Denmark MAL Code} XYLENES (12.00%) 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 Σ [ing conc / ing limit] < 1 Figure-after-dash 6 calculated ratio: Σ [ing conc / ing limit] = 0.024565 METHYL ALCOHOL: Ing conc / Ing limit = 0.015 / 20 = 0.00075 Minimum value of concentration limit associated with figure-after-dash 6 = 20 QUARTZ (<10 microns): Ing conc / Ing limit = 0.00594 / 10 = 0.000594 Minimum value of concentration limit associated with figure-after-dash 6 = 10 BENZENE: Ing conc / Ing limit = 0.002272 / 0.1 = 0.02272 Minimum value of concentration limit associated with figure-after-dash 6 = 0.1 2-METHOXY-1-PROPYL ACETATE: Ing conc / Ing limit = 0.000099 / 0.2 = 0.000495 Minimum value of concentration limit associated with figure-after-dash 6 = 0.2 dibutyltin dilaurate: Ing conc / Ing limit = 0.000009 / 1 = 0.000009 Minimum value of concentration limit associated with figure-after-dash 6 = 1 Figure-after-dash 4 calculated ratio: Σ [ing conc / ing limit] = 0.00000018 ACETIC ACID: Ina conc / Ina limit = 0.00000045 / 25 = 0.000000018 Minimum value of concentration limit associated with figure-after-dash 4 = 25