Audit - EU DK MAL Code

PPG VIKOTE 56 YELLOW 3138

	Product as is	Ready-for-use mixture
MAL Code	4-3	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.	Not applicable.
	MAL-code: 4-3 **Application:** When spraying in new* booths if the operator is outside 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. - Air-supplied half mask and eye protection 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. - Air-supplied half mask, coveralls and eye protection must be worn. 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 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. - 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.	Not applicable.

- 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.

Low Boiling Liquid	Not applicable.	Not applicable.
MAL Number	3116.3	Not applicable.
Audit (Textual)	3 Figure-before-dash (from MAL Number) = 4 1600 < MAL Number [3116.3] ≤ 3200 MAL Number = density * Σ[Conc(i) * MAL Factor(i)] = 1.054 * 2956.7 = 3116.3 Density (from Density (g/m³) data entry) = 1.054 Σ[Conc(i) * MAL Factor(i)] = 2956.7 [Solvent naphtha (petroleum), light arom.] Conc * MAL Factor = 35.89% * 58 = 2081.8 MAL Factor entered against range: '0 to 100' = 58 [XYLENES] Conc * MAL Factor = 15.19% * 46 = 698.9 MAL Factor entered against range: '0 to 100' = 46 [ETHYLBENZENE] Conc * MAL Factor = 2.707% * 46 = 124.5 MAL Factor entered against range: '0 to 100' = 46 [cyclohexanone] Conc * MAL Factor = 0.4468% * 70 = 31.28 MAL Factor entered against range: '0 to 100' = 70 [ETHYL ALCOHOL] Conc * MAL Factor = 0.2596% * 7 = 1.817 MAL Factor entered against range: '0 to 100' = 7 [N-BUTYL METHACRYLATE] Conc * MAL Factor = 0.1393% * 16 = 2.229 MAL Factor entered against range: '0 to 100' = 16 [METHYL METHACRYLATE] Conc * MAL Factor = 0.1366% * 46 = 6.282 MAL Factor entered against range: '0 to 100' = 46 [TOLUENE] Conc * MAL Factor = 0.07175% * 74 = 5.310 MAL Factor entered against range: '0 to 100' = 74 [1-METHOXY-2-PROPYL ACETATE] Conc * MAL Factor = 0.04634% * 19 = 0.8804 MAL Factor entered against range: '0 to 100' = 19 [N-BUTYL ACETATE] Conc * MAL Factor = 0.03006% * 14 = 0.4208 MAL Factor entered against range: '0 to 100' = 14 [BUTANONE / ETHYL METHYL KETONE] Conc * MAL Factor = 0.01073% * 48 = 0.5150 MAL Factor entered against range: '0 to 100' = 48 [PROPYLENE GLYCOL MONOMETHYL ETHER] Conc * MAL Factor = 0.003642% * 28 = 0.1020 MAL Factor entered against range: '0 to 100' = 28 [ISOPROPYL ALCOHOL] Conc * MAL Factor = 0.00348% * 29 = 0.1009 MAL Factor entered against range: '0 to 100' = 29 [BENZENE] Conc * MAL Factor = 0.002692% * 880 = 2.369 MAL Factor entered against range: '0 to 100' = 880 [DIMETHYL GLUTARATE] Conc * MAL Factor = 0.0008020% * 4 = 0.003208 MAL Factor entered against range: '0 to 100' = 4 [DIMETHYL SUCCINATE] Conc * MAL Factor = 0.0002745% * 5 = 0.001373 MAL Factor entered against range: '0 to 100' = 5 [2-METHOXY-1-PROPYL ACETATE] Conc * MAL Factor = 0.00008307% * 181 = 0.01504 MAL Factor entered against range: '0 to 100' = 181 [CUMENE] Conc * MAL Factor = 0.00006825% * 1000 = 0.06825	Not applicable.

MAL Factor entered against range: '0 to 100' = 1000
[METHYL ALCOHOL] Conc * MAL Factor = 0.000002397% * 54 = 0.0001295
MAL Factor entered against range: '0 to 100' = 54
[1-BUTANOL] Conc * MAL Factor = 0.000001525% * 67 = 0.0001022
MAL Factor entered against range: '0 to 100' = 67
[ACETIC ACID] Conc * MAL Factor = 0.000001295% * 400 = 0.0005181
MAL Factor entered against range: '0 to 100' = 400
[ISOBUTYL METHACRYLATE] Conc * MAL Factor = 0.0000004110% * 1000 = 0.0004110
MAL Factor entered against range: '0 to 100' = 1000
Ingredients with MAL factor of 0 [did not contribute] {Denmark MAL Code}
2-propenoic acid, 2-methyl-, butyl ester, polymer (27.58%)
Default assumption [non-volatile] = 0
Bismuth vanadate (>10 microns) (7.508%)
Default assumption [non-volatile] = 0
C14-C17 CHLORINATED HYDROCARBONS (4.1%)
MAL Factor entered against range: '0 to 100' = 0
TITANIUM DIOXIDE (1.801%)
MAL Factor entered against range: '0 to 100' = 0
BARIUM SULFATE (1.427%)
MAL Factor entered against range: '0 to 100' = 0
12-hydroxyoctadecanoic acid, reaction products with 1,3-benzenedimethanamine and hexamethylenediamine (0.9021%)
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
QUATERN.AM.CPS,BIS(HYDROGEN.TALLOW ALKYL)DIMET.-,BENTONITE (0.5690%)
MAL Factor entered against range: '0 to 100' = 0
ZINC ORTHOPHOSPHATE (0.3806%)
MAL Factor entered against range: '0 to 100' = 0
IRON HYDROXIDE OXIDE (0.2551%)
MAL Factor entered against range: '0 to 100' = 0
CALCIUM MOLYBDATE (0.1903%)
MAL Factor entered against range: '0 to 100' = 0
modified polyurethane (0.1125%)
Default assumption [non-volatile] = 0
non-hazardous polymer (0.0679%)
Default assumption [non-volatile] = 0
ALUMINUM HYDROXIDE (0.06668%)
MAL Factor entered against range: '0 to 100' = 0
SILICA (0.01905%)
MAL Factor entered against range: '0 to 100' = 0
WATER (0.01842%)
MAL Factor entered against range: '0 to 100' = 0
acrylic copolymer (0.009590%)
Default assumption [non-volatile] = 0
ZIRCONIUM OXIDE (0.009525%)
MAL Factor entered against range: '0 to 100' = 0
Bismuth vanadate (<10 microns) (0.009421%)
Default assumption [non-volatile] = 0
TRIMETHYLOLPROPANE (0.008572%)
MAL Factor entered against range: '0 to 100' = 0
DIKETO-PYRROLOPYRROL (0.00841%)
MAL Factor entered against range: '0 to 100' = 0
QUARTZ (<10 microns) (0.00522%)
MAL Factor entered against range: '0 to 100' = 0
Siloxanes and Silicones, methyl 3,3,3-trifluoropropyl (0.003150%)
Default assumption [non-volatile] = 0
COPPER PHTHALO GREEN (0.002717%)
MAL Factor entered against range: '0 to 100' = 0
BLOCK COPOLYMER (0.001889%)
Default assumption [non-volatile] = 0
ALUMINUM POWDER (0.000768%)
MAL Factor entered against range: '0 to 100' = 0
DIMETHYL ADIPATE (0.0001193%)
MAL Factor entered against range: '0 to 100' = 0
CHROMIUM (0.0001024%)
MAL Factor entered against range: '0 to 100' = 0
CALCIUM CARBONATE (0.00005544%)
MAL Factor entered against range: '0 to 100' = 0
2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo- (0.00004108%)

MAL Factor entered against range: '0 to 100' = 0
NICKEL (0.0000384%)
MAL Factor entered against range: '0 to 100' = 0
organotin compound (0.0000125%)
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 = 0.1
2-TERT-BUTYLAMINOETHYL METHACRYLATE (0.000003425%)
MAL Factor entered against range: '0 to 100' = 0
DENATONIUM BENZOATE (0.0000029%)
Default assumption [non-volatile] = 0
BUTYLATED HYDROXYTOLUENE (0.0000005296%)
MAL Factor entered against range: '0 to 100' = 0
OCTAMETHYLCYCLOTETRASILOXANE (0.00000045%)
MAL Factor entered against range: '0 to 100' = 0
TIN (0.00000003995%)
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 = 2
4-METHOXYPHENOL (0.00000001712%)
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 (15.19%)
Ingredient concentration is above the limit [10%]
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] = 0.0278701369423
QUARTZ (<10 microns): Ing conc / Ing limit = 0.00522 / 10 = 0.000522
Minimum value of concentration limit associated with figure-after-dash 6 = 10
BENZENE: Ing conc / Ing limit = 0.002692 / 0.1 = 0.02692
Minimum value of concentration limit associated with figure-after-dash 6 = 0.1
2-METHOXY-1-PROPYL ACETATE: Ing conc / Ing limit = 0.00008307 / 0.2 = 0.0004153
Minimum value of concentration limit associated with figure-after-dash 6 = 0.2
NICKEL: Ing conc / Ing limit = 0.0000384 / 5 = 0.00000768
Minimum value of concentration limit associated with figure-after-dash 6 = 5
METHYL ALCOHOL: Ing conc / Ing limit = 0.000002397 / 20 = 0.0000001199
Minimum value of concentration limit associated with figure-after-dash 6 = 20
Figure-after-dash 5 calculated ratio: Σ [ing conc / ing limit] = 0.16699979108486
N-BUTYL METHACRYLATE: Ing conc / Ing limit = 0.1393 / 1 = 0.1393
Minimum value of concentration limit associated with figure-after-dash 5 = 1
METHYL METHACRYLATE: Ing conc / Ing limit = 0.1366 / 5 = 0.02731
Minimum value of concentration limit associated with figure-after-dash 5 = 5
2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-: Ing conc / Ing limit = 0.00004108 / 5 = 0.000008217
Minimum value of concentration limit associated with figure-after-dash 5 = 5
NICKEL: Ing conc / Ing limit = 0.0000384 / 0.1 = 0.000384
Minimum value of concentration limit associated with figure-after-dash 5 = 0.1
2-TERT-BUTYLAMINOETHYL METHACRYLATE: Ing conc / Ing limit = 0.000003425 / 5 = 0.0000006850
Minimum value of concentration limit associated with figure-after-dash 5 = 5
ISOBUTYL METHACRYLATE: Ing conc / Ing limit = 0.0000004110 / 5 = 0.00000008220
Minimum value of concentration limit associated with figure-after-dash 5 = 5
4-METHOXYPHENOL: Ing conc / Ing limit = 0.00000001712 / 1 = 0.00000001712
Minimum value of concentration limit associated with figure-after-dash 5 = 1
Figure-after-dash 4 calculated ratio: Σ [ing conc / ing limit] = 0.00000005180954
ACETIC ACID: Ing conc / Ing limit = 0.000001295 / 25 = 0.00000005181
Minimum value of concentration limit associated with figure-after-dash 4 = 25