

Audit - EU DK MAL Code

STEELGUARD 651 WHITE

	Product as is	Ready-for-use mixture
MAL Code	1-6	Not applicable.
MAL Protection	<p data-bbox="309 323 1825 384">According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:</p> <p data-bbox="309 419 1825 539">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.</p> <p data-bbox="309 571 1825 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="309 715 488 743">MAL-code: 1-6</p> <p data-bbox="309 746 1825 927">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. 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> <ul data-bbox="309 959 719 987" style="list-style-type: none">- Protective clothing must be worn. <p data-bbox="309 1023 1825 1083">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> <ul data-bbox="309 1115 954 1144" style="list-style-type: none">- Gas filter mask and protective clothing must be worn. <p data-bbox="309 1176 1267 1204">When spraying in existing* spray booths, if the operator is outside the spray zone.</p> <ul data-bbox="309 1236 1028 1265" style="list-style-type: none">- Air-supplied full mask and protective clothing must be worn. <p data-bbox="309 1297 1825 1358">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> <ul data-bbox="309 1390 1216 1418" style="list-style-type: none">- Air-supplied half mask, protective clothing and eye protection must be worn. <p data-bbox="309 1450 1825 1505">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>	Not applicable.

- Air-supplied full mask, protective clothing 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
MAL Number
Audit (Textual)

Not applicable.

Not applicable.

170.7

Not applicable.

1-6

Not applicable.

Figure-before-dash (from MAL Number) = 1

100 < MAL Number [170.7] ≤ 400

MAL Number = density * Σ[Conc(i) * MAL Factor(i)] = 1.413 * 120.8 = 170.7

Density (from Density (g/m³) data entry) = 1.413

Σ[Conc(i) * MAL Factor(i)] = 120.8

[PETROLEUM DISTILLATES] Conc * MAL Factor = 0.1750% * 12 = 2.100

MAL Factor entered against range: '>0' = 12

[ISOBUTYRALDEHYDE] Conc * MAL Factor = 0.00991% * 1000 = 9.91

Found via vapor pressure and EU CLP classification = 1000

Vapor Pressure ≥ 0.1 mm Hg

Vapor Pressure (mm Hg) from entered value = 173.00221

GHS Status - EU

Acute toxicity - Oral - Category 4 - From 'Entered data'

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

Serious eye damage / eye irritation - Category 2 - From 'Entered data'

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

[2-OCTYL-2-H-ISOTHIAZOL-3-ONE] Conc * MAL Factor = 0.00544% * 20000 = 108.8

Found via vapor pressure and EU CLP classification = 20000

Vapor Pressure ≥ 0.01 mm Hg

Vapor Pressure (mm Hg) from entered value = 2.23518327

GHS Status - EU

Acute toxicity - Oral - Category 3 - From 'Entered data'

Entered data - [EU] [15] [Datalink]

Acute toxicity - Dermal - Category 3 - From 'Entered data'

Entered data - [EU] [15] [Datalink]

Acute toxicity - Inhalation (overall) - Category 2

Acute toxicity - Inhalation (dust/mist) - Category 2 - From 'Entered data'

Entered data - [EU] [15] [Datalink]

[ACETONE] Conc * MAL Factor = 0.0000225% * 23 = 0.0005175

MAL Factor entered against range: '>0' = 23

[1,4-DIOXANE] Conc * MAL Factor = 0.00000225% * 390 = 0.00008775

MAL Factor entered against range: '>0' = 390

[FORMALDEHYDE] Conc * MAL Factor = 0.00000225% * 2500 = 0.0005625

MAL Factor entered against range: '<0.1' = 2500

[ACETALDEHYDE] Conc * MAL Factor = 0.00000225% * 1000 = 0.000225

MAL Factor entered against range: '>0' = 1000

[ETHYLENE OXIDE] Conc * MAL Factor = 0.00000225% * 11111.1 = 0.0025

From DK (Working Environment Authority) OELs: OELs in mg/m³ and ppm available: 2 * 10000 / OEL in mg/m³ = 2 * 10000 / 1.8 = 11111.1

Available value in mg/m³ = 1.8

Available value in ppm = 1

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

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

AMMONIUM POLYPHOSPHATE (29.41%)
 MAL Factor entered against range: '>0' = 0
 WATER (28.27%)
 MAL Factor entered against range: '>0' = 0
 ETHYLENE-VINYL ACETATE COPOLYMER (11.28%)
 MAL Factor entered against range: '>0' = 0
 TITANIUM DIOXIDE (11.17%)
 MAL Factor entered against range: '>0' = 0
 MELAMINE (8.219%)
 MAL Factor entered against range: '>0' = 0
 PENTAERYTHRITOL (8.071%)
 MAL Factor entered against range: '>0' = 0
 2;2;4-TRIMETHYL-1;3-PENTANEDIOL MONOISOBUTYRATE (1.952%)
 MAL Factor entered against range: '>0' = 0
 ALUMINUM HYDROXIDE (0.3428%)
 MAL Factor entered against range: '>0' = 0
 HYDROXYETHYL CELLULOSE (0.2250%)
 MAL Factor entered against range: '>0' = 0
 DIPENTAERYTHRITOL (0.1639%)
 MAL Factor entered against range: '>0' = 0
 9(or 10)-sulphooctadecanoic acid, potassium salt (0.1573%)
 Default assumption [non-volatile] = 0
 POLYURETHANE RESIN (0.1454%)
 Default assumption [non-volatile] = 0
 ZIRCONIUM OXIDE (0.1176%)
 MAL Factor entered against range: '>0' = 0
 TRIMETHYLOLPROPANE (0.05282%)
 MAL Factor entered against range: '>0' = 0
 Sodium Polyacrylate (0.04975%)
 MAL Factor entered against range: '>0' = 0
 STARCH ENZYMATICALLY MODIFIED (0.03876%)
 Default assumption [non-volatile] = 0
 ZIRCONIUM TETRAHYDROXIDE (0.03529%)
 MAL Factor entered against range: '>0' = 0
 VINYL RESIN (0.03128%)
 MAL Factor entered against range: '>0' = 0
 nitrate salts (0.01248%)
 Default assumption [non-volatile] = 0
 TITANIUM DIOXIDE (<10 microns) (0.01006%)
 MAL Factor entered against range: '>0' = 0
 2;2;4-TRIMETHYL-1;3-PENTANEDIOL (0.00991%)
 Default assumption [non-volatile] = 0
 2,2,4-Trimethyl-1,3-pentenediol diisobutyrate (0.00991%)
 MAL Factor entered against range: '>0' = 0
 ALUMINUM DISTEARATE (0.00931%)
 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 = 1
 POLYPROPYLENE GLYCOL (0.0057%)
 Default assumption [non-volatile] = 0
 SODIUM HYDROGEN PHOSPHATE (NAH₂PO₄) (0.005%)
 MAL Factor entered against range: '>0' = 0
 DISODIUM PHOSPHATE (0.00375%)
 MAL Factor entered against range: '>0' = 0
 ISOTHIAZOLONE SOLUTION (0.0003188%)
 Default assumption [non-volatile] = 0
 1,2-BENZISOTHIAZOLONE (0.00005567%)
 MAL Factor entered against range: '>0' = 0
 2-METHYL-4-ISOTHIAZOLIN-3-ONE (0.000003332%)
 MAL Factor entered against range: '>0' = 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}
 9(or 10)-sulphooctadecanoic acid, potassium salt (0.1573%)
 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 - Unborn child - Category 1B - Effect On: UnbornChild - From 'Entered data'

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