SIGMAGUARD 750 BINDER

Product as is		**Ready-for-use mixture**

MAL Code   5-3   Not applicable.

MAL Protection   **According to the regulations on work involving coded products, the following stipulations apply to the use of personal protective equipment:**   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   Not applicable.

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.

- 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.

Low Boiling Liquid	Not applicable.	Not applicable.
MAL Number	3272.6	Not applicable.
Audit (Textual)	5-3	Not applicable.

Figure-before-dash (from MAL Number) = 5
3200 < MAL Number [3272.6]
MAL Number = density * Σ[Conc(i) * MAL Factor(i)] = 1.138 * 2875.7 = 3272.6
Density (from Density (g/m³) data entry) = 1.138
Σ[Conc(i) * MAL Factor(i)] = 2875.7
[XYLENES] Conc * MAL Factor = 22.59% * 46 = 1039.3
MAL Factor entered against range: '0 to 100' = 46
[PROPYLENE GLYCOL MONOMETHYL ETHER] Conc * MAL Factor = 13.94% * 28 = 390.2
MAL Factor entered against range: '0 to 100' = 28
[Tetraethyl Silicate] Conc * MAL Factor = 5.597% * 82 = 459.0
MAL Factor entered against range: '0 to 100' = 82
[ETHYLBENZENE] Conc * MAL Factor = 4.007% * 46 = 184.3
MAL Factor entered against range: '0 to 100' = 46
[METHYL ALCOHOL] Conc * MAL Factor = 1.08% * 54 = 58.32
MAL Factor entered against range: '0 to 100' = 54
[trimethyl borate] Conc * MAL Factor = 0.72% * 1000 = 720
MAL Factor entered against range: '0 to 100' = 1000
[ETHYL ALCOHOL] Conc * MAL Factor = 0.252% * 7 = 1.764
MAL Factor entered against range: '0 to 100' = 7
[TOLUENE] Conc * MAL Factor = 0.1068% * 74 = 7.906
MAL Factor entered against range: '0 to 100' = 74
[2-METHOXY-1-PROPANOL] Conc * MAL Factor = 0.0406% * 267 = 10.84
MAL Factor entered against range: '0 to 100' = 267
[BENZENE] Conc * MAL Factor = 0.004007% * 880 = 3.526
MAL Factor entered against range: '0 to 100' = 880
[ACETIC ACID] Conc * MAL Factor = 0.0014% * 400 = 0.56
MAL Factor entered against range: '0 to 100' = 400
Ingredients with MAL factor of 0 [did not contribute] {Denmark MAL Code}
QUARTZ (>10 microns) (22.39%)
MAL Factor entered against range: '0 to 100' = 0
ETHYL SILICATE POLYMER (22.15%)
MAL Factor entered against range: '0 to 100' = 0
QUARTZ (<10 microns) (2.552%)
MAL Factor entered against range: '0 to 100' = 0
WATER (2.434%)
MAL Factor entered against range: '0 to 100' = 0
ORGANIC DERIVATIVE OF A MONTMORILLONITE CLAY (1.462%)
MAL Factor entered against range: '0 to 100' = 0
ETHYL CELLULOSE (0.5%)
MAL Factor entered against range: '0 to 100' = 0
SULFURIC ACID (0.1275%)
MAL Factor entered against range: '0 to 100' = 0
ZINC CHLORIDE (0.04834%)
MAL Factor entered against range: '0 to 100' = 0
ZINC OXIDE (0.0004883%)

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 (22.59%)
            Ingredient concentration is above the limit [10%]
        ETHYL SILICATE POLYMER (22.15%)
            Ingredient concentration is above the limit [1%]
        Tetraethyl Silicate (5.597%)
            Ingredient concentration is above the limit [1%]
        QUARTZ (<10 microns) (2.552%)
            Ingredient concentration is above the limit [1%]
        METHYL ALCOHOL (1.08%)
            Ingredient concentration is above the limit [1%]
    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] = 0.3696065
            QUARTZ (<10 microns): Ing conc / Ing limit = 2.552 / 10 = 0.2552
                Minimum value of concentration limit associated with figure-after-dash 6 = 10
            METHYL ALCOHOL: Ing conc / Ing limit = 1.08 / 20 = 0.054
                Minimum value of concentration limit associated with figure-after-dash 6 = 20
            2-METHOXY-1-PROPANOL: Ing conc / Ing limit = 0.0406 / 2 = 0.0203
                Minimum value of concentration limit associated with figure-after-dash 6 = 2
            BENZENE: Ing conc / Ing limit = 0.004007 / 0.1 = 0.04007
                Minimum value of concentration limit associated with figure-after-dash 6 = 0.1
        Figure-after-dash 4 calculated ratio: Σ [ing conc / ing limit] = 0.0255566144
            SULFURIC ACID: Ing conc / Ing limit = 0.1275 / 5 = 0.02550
                Minimum value of concentration limit associated with figure-after-dash 4 = 5
            ACETIC ACID: Ing conc / Ing limit = 0.0014 / 25 = 0.000056
                Minimum value of concentration limit associated with figure-after-dash 4 = 25