

Material Safety Data Sheet

according to 91/155/EC

Trade name : SFP 171HB**Printing date** : 23.03.16**Reviewed on** : 22.03.16**Page** : 001/006**01. Identification of substance, preparation and company****Trade name**

Saphira® UV Coating High Gloss U6650

Supplier

Heidelberg Asia Pte., Ltd.

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Emergency information

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02. Composition/Information on components**Chemical characterization**

UV-curing overprintvarnish based on low viscosity reactive acrylates

Hazardous components**Tripropyleneglycoldiacrylate****Concentration** : 30 - 50 %**CAS number** : 42978-66-5**Symbol** : XI **R** : 36/38-43**03. Hazards identification****Hazard designation**

Irritant

Particular information pertaining specific risk for human and environment

The product is water polluting

May cause sensitization by skin contact

Irritating to eyes and skin

04. First aid measures**General**

immediately remove all contaminated clothing

In all cases of doubt, or when symptoms persist, seek medical attention.

unconsciousness: lateral position - call a physician

Inhalation

Take the casualty into the fresh air and keep warm

irregular breathing/no breathing: artificial respiration

call a physician

Skin contact

wash away with soap and water and rinse

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Do NOT use solvents or thinners.

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Flush with plenty of water (10 - 15 min.)

call a physician

In case of accidental eye contact avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.

Ingestion

Call a doctor

Keep at rest.

Do not induce vomiting

05. Fire-fighting measures**Extinguishing media - suitable**

Carbon dioxide, foam, sand, water

Special risk posed by the substance or by the actual preparation, its combustion products or gases discharged

In case of fire, dangerous smoke gases such as carbon dioxide, carbonmonoxide, soot and nitrogen oxides can be produced. Therefore, take suitable precautionary measures for fire fighting. Residues remaining after a fire have to be disposed of appropriately.

Protective equipment

Breathing apparatus with an independent source of air may be required.

Additional information

Cool endangered containers with water in case of fire

06. Accidental release measures**Personal precautions**

Remove any sources of ignition. Provide for good ventilation.

Refer to protective measures listed in sections 7 and 8.

Environmental precautions

Do not empty into drains

If the product contaminates lakes, rivers or sewages, inform appropriate authorities in accordance with local regulations.

Methods for cleaning up/collecting

Remove by liquid absorbing material (e.g. kieselguhr) and process according to waste regulations.

Clean preferably with a detergent; avoid use of solvents.

07. Handling and storage**Information for safe handling**

Do not allow the product to come into contact with the skin. Particularly, do not rub on the face. Always wear gloves and protective goggles when washing the machine. Soiling clothing with the product should also be avoided as migration onto the skin is possible. Skin contact is also possible from paper waste materials that can occur when lamps are switched off, and from used cleaning clothes. Do not clean soiled area of skin with solvent, but solely with mild handwashing paste, soap and plenty of water.

Information about protection against explosions and fires

Keep away from ignition sources - No smoking

Do not store alongside highly flammable materials.

Requirements to be met by storerooms and containers

Keep container tightly closed. Never use pressure to empty: container is not a pressure vessel.

Nosmoking. Prevent unauthorized access.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Recommended storage temperature: 15 - 35 °C.

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Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.
Do not store alongside highly flammable materials. Keep away from food, drink and animal feeding stuff.

Further information about storage conditions

Always keep in containers of same material as the original one. Avoid heating and direct sunlight.
Keep containers dry and cool

08. Exposure controls and personal protection**Additional information about engineering measures**

Provide good space ventilation, particularly during drying, because ozone may develop through radiation curing.

Components with critical values that require monitoring at the workplace (exposure limits)

OZONE (ARISES FROM UV RADIATION)	CAS :10028-15-6
Specification	: Short Term Exposure Limit (STEL)
Nation	:GB
Value	:0,30 ppm
Valid as per (mm/yy)	:03 / 94
Specification	:Long Term Exposure Limit (LTEL)
Nation	:GB
Value	:0,10 ppm
Valid as per (mm/yy)	:03 / 94

Personal protective equipment**Respiratory equipment**

take breathing protection measures(see also instruct.to avoid accidents)

Skin protection

Polyethylene or polypropylene gloves with textile undergloves are required. PVC or rubber gloves are not recommended.

Eye protection

use safety glasses

Body protection

Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber. All parts of the body should be washed after contact.

09. Physical and chemical properties**Image**

Form	:liquid
Colour	:transparent
Odour	:mild

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Relevant safety data**Change in condition****Boiling point:** not applicable**Flashpoint :** >100 °C**Ignition temperature :** ca. 235 °C**Explosive limits**

Lower / Upper : not applicable/not applicable

Vapor pressure(50 °C): <0,1 hPa**Density(20 °C):** 1,1 g/cm³**Solubility in water :** insoluble**Viscosity :** 200 – 250 cP s

Brookfield(25-30 °C)

Additional information

the physical specifications are approximate values and refer to the used safety relevant component(s).

10. Stability and reactivity**Conditions to avoid**

Heat, strong UV sources

Materials to avoid

Keep away from free radical initiators, peroxides, strong alkalis or reactive metals to prevent exothermic polymerization.

Dangerous decomposition products

When exposed to high temperatures, dangerous decomposition products such as carbon dioxide, carbon monoxide, soot and nitrogen oxides can be produced.

11. Toxicological information**Experience on practice:**

There are no data available on the preparation itself.

The product can cause irritation on the eyes, mucous membranes and skin. Also allergic reactions can occur. Any person exhibiting allergic reactions on working with UV-curing products must be removed from any further contact with substances of this nature. This is because, following one exposure, persons with allergies usually react even more strongly on renewed exposure to the irritant concerned. The inhalation of aerial droplets or aerosols may cause irritation of the respiratory tract. Ingestion may cause collapse, severe respiratory difficulties and central nervous system stimulation.

Additional toxicological information

The product was classified in toxicological terms on the basis of the results of the calculation procedure outlined within General Directive on Preparations (88/37/EEC).

12. Ecological information

Details on elimination (persistence / degradability)

There are no data available on the preparation itself.

Additional ecological information

Do not empty into waters or drains

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13. Disposal considerations**Product****Recommendation**

Dispose of or incinerate in accordance with corresponding regulations.

Contaminated packaging**Recommendation**

Containers which have not been fully emptied or which contain contaminants which have not set hard, must be disposed of in the same way as the product itself. Containers containing fully set residues can be disposed of with the domestic waste.

14. Transport information**Land transport ADR/RID and GGVS/GGVE****Classification**

GGVS/GGVE : Class --- Number -- Letter --

RID/ADR : Class --- Number -- Letter --

Inland waterways ADN/ADNR**Classification**

ADN/ADNR : Class ---

Maritime transport IMDG/GGVSea**Classification**

IMDG-Code : -.-

UN-number :

Air transport ICAO-TI and IATA-DGR

Classification

ICAO/IATA Class ---

Additional transport information

not hazardous goods as described in the transport regulations

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15. Regulatory information

Classification according to EEC directives

Danger symbol and danger designation

Xi Irritant

Hazard-determining components of labelling

Tripolyleneglycoldiacrylate

Risk-phrases

43 May cause sensitization by skin contact

36/38 Irritating to eyes and skin

Safety-phrases

20/21 When using do not eat, drink or smoke

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

28 After contact with skin, wash immediately with plenty of water and soap

29 Do not empty into drains

37/39 Wear suitable protective gloves and eye/face protection

51 Use only in well-ventilated areas.

16. Other information

According to their chemical structure, the applied raw materials do not contain any antimony, arsenic, soluble barium, lead, cadmium, chromium, mercury and selenium.

The instructions are based on today's information and knowledge. The safety data sheet describes products in relation to safety requirements. These instructions do not assure application technological properties of the product.