01. Identification of substance, preparation and company

Trade name
Saphira® UV Coating High Gloss U6630

Supplier
Heidelberg Asia Pte., Ltd.

Address
Heidelberg Asia Pte., Ltd.
151 Lorong Chuan
#05-09 New Tech Park (Lobby H)
Singapore 556741
Phone : +65 6664 2100 Fax : +65 6664 2609

Emergency information
Telephone : +66-2-8999414-5

02. Composition/Information on components

Chemical characterization
UV-curing overprint varnish 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
Do NOT use solvents or thinners.

Eye contact
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, carbon monoxide, 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 preferabily 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.
No smoking. Prevent unauthorized access.

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

Information about separation of incompatible products
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

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 alkalies 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 irritatin 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 Directiv on Preparations (88/37/EEC).

12. Ecological information

Details on elimination (persistance / degradibility)

There are no data available on the preparation itself.

Additional ecological information

Do not empty into waters or drains

13. Disposal considerations

Product
Recommendation
Dispose of or incinerate in accrodance 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

15. Regulatory information

Classification according to EEC directives

Danger symbol and danger designation
Xi Irritant
Hazard-determining components of labelling
Tripropyleneglycoldiacrylate
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.