Material Safety Data Sheet

1 Identification of Product:

· Use: Photostencil Emulsion

.Range:SE-618

.Manufactur/supplier: SERIPRINTEK COMPANY

No.71 Ln.150 Guangfu Rd.Taichung City, Taiwan

TEL:+886 4 27065758 FAX:+886 4 27065717

2 Composition/Data on components:

- · Chemical characterization
- · Description: Mixture of substances listed below with nonhazardous additions.

| _ | | | | |
|-------------------------|--|------|--|--|
| · Dangerous components: | | | | |
| CAS: 42978-66-5 | (1-methyl-1,2-ethanediyl)bis[oxy(methyl-2,1- | 1-5% | | |
| EINECS: 256-032-2 | | | | |
| | Xi, 🜇 N; R 36/37/38-43-51/53 | | | |
| | Proprietary multifunctional acrylate | 1-5% | | |
| | Xi; R 36/37/38 | | | |
| CAS: 9014-85-1 | Ethoxylated Tetramethyldecynediol | 1-5% | | |
| | ▼ Xi; R 36 | | | |

· Additional information

For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· Hazard description:



Xi Irritant

- · Information pertaining to particular dangers for man and environment R 43 May cause sensitisation by skin contact.
 - R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- · Classification system

The classification was made according to the latest editions of the EU-lists, and expanded by company and literature data.

4 First aid measures

General information

Never make an unconscious person vomit or drink fluids.

Immediately remove any clothing soiled by the product.

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Immediately wash with soap and water and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact

Rinse open eye for several minutes under running water. Then consult a doctor.

· After swallowing

Give patient copious amounts of water to drink and provide fresh air. Call for a doctor immediately.

- GB

5 Fire fighting measures

- · Suitable extinguishing agents
 - CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · For safety reasons unsuitable extinguishing agents Water with full jet.
- Special hazards caused by the material, its products of combustion or resulting gases:

In case of fire, the following can be released: Carbon monoxide (CO)

Nitrogen oxides (NOx)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

· Protective equipment: Wear self-contained breathing apparatus.

6 Accidental release measures

· Person-related safety precautions:

Refer to the protective measures stated in Sections 7 and 8. Keep unprotected personnel away.

Ensure adequate ventilation

· Measures for environmental protection:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste according to section 13.

7 Handling and storage

- · Handling
- Information for safe handling:

Store in cool, dry place in tightly sealed containers.

Keep away from heat and direct sunlight.

Ensure good ventilation and extraction at the workplace.

- · Storage: Store in accordance with current national regulations.
- Requirements to be met by storerooms and containers: Store between 5 30°C. Information about storage in one common storage facility:

Do not store together with alkalis (caustic solutions)

Do not store together with oxidizing and acidic materials.

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.
- · Components with limit values that require monitoring at the workplace:
- Additional information:

The instructions and information provided by the manufacturer of the personal protective equipment on use, storage, maintenance and replacement must always be followed.

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin. Store protective clothing separately.

- · Breathing equipment: Not necessary if room is well-ventilated.
- Protection of hands:

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The selection of single or multi-use gloves is dependent upon the level of exposure (nitrile/neoprene gloves will last longer than latex/rubber). The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Always ensure that gloves are free from defects and that they are stored and used correctly.

Latex/Rubber

Nitrile

Neoprene (Contd. on page 3)

(Contd. of page 2)

| Туре | Single Use | Multi Use | Heavy Duty (Gauntlets) | Single Use | Multi Use | Heavy Duty (Gauntlets) |
|---------------------------|----------------|-----------------|---------------------------|-----------------|----------------|---------------------------|
| Preparation Print Shop | X | Y | X | X | Y | X |
| Solvent Inks | Y | Y | Y | Y | Y | Y |
| UV Inks | X | X | X | Y | Y | Y |
| Reclaim | X | X | Y | X | X | Y |

X = not recommendedY = recommended

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Hands should be inspected on a regular basis for any signs of skin damage or inflammation

Penetration time of glove material

The exact break through time has to be obtained from the manufacturer of the protective gloves and must be observed.

· Eye protection: Safety glasses

· Body protection:

Protective work clothing; disposable overalls are preferable.

Acrylates, like any other organic solvent, are skin and/or eye irritants. Since acrylates do not evaporate, they will remain on the skin or clothes for extended periods. This long term exposure, caused by the non volatility, can give rise to dermatitis. It is essential that the measures given above are always followed including when conducting water wash up.

COSHH Essentials for Printers Control Guidance Sheet:

Guidance is provided by the Health and Safety executive (HSE) concerning COSHH (Control of Substances Hazardous to Health) for printers.

See COSHH Essentials for Printers on the HSE website:

www.hse.gov.uk

www.hse.gov.uk/printing/coshhessentials/index.htm

| 9 Physi | ical and | chemical | properties: |
|---------|----------|----------|-------------|
| | | | |

| · General Information | |
|---|---|
| Form: Colour: | Fluid |
| Odour: | According to product specification Characteristic |
| · Change in condition Melting point/Melting range: Boiling point/Boiling range: | |
| · Flash point: | Not applicable |
| · Self igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Vapour pressure at 20°C: | 23.0 hPa |
| · Density at 20°C: · Water: | 1.08000 g/cm³ Fully miscible |
| · pH-value at 20°C: | 4.2 |
| · Solvent content: Organic solvents: | 0.0 % |

10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided:
 - No decomposition if used according to specifications.
- · Dangerous products of decomposition: No dangerous decomposition products known

11 Toxicological information

- · Acute toxicity:
- \cdot ${\it Sensitization:}$ Sensitization possible through skin contact.

12 Ecological information:

· General notes:

There are no data on the preparation itself.

The preparation has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and is not classified as dangerous for the environment, but contains substance(s) dangerous for the environment. Also refer to Section 2.

Do not allow undiluted product to reach ground water, water course or sewage system. The product is processed using water and diluted product should only ever be discharged to a sewer. Permission for such discharge needs to be obtained from the local enforcing authority. Enforcers may impose restrictions on the concentrations that can be discharged.

13 Disposal considerations

- · Product:
- Recommendation

Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements.

European waste catalogue

09 01 99 wastes not otherwise specified

- Waste Hazard Classification: H4 Irritant
- Recommendation:

Dispose of product according to official regulations. Also see Section 16 'Other Information'

14 Transport information

- · Land transport ADR/RID (cross-border)
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class:
- · Transport/Additional information:

Not dangerous according to the above specifications.

15 Regulations

· Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives on Hazardous Materials

· Code letter and hazard designation of product:

Xi Irritant

· Hazard-determining components of labelling:

 $(1-methyl-1,2-ethanediyl) \, bis \, [oxy \, (methyl-2,1-ethanediyl)] \, \, \, diacrylate$

· Risk phrases:

May cause sensitisation by skin contact.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

(Contd. on page 5)