

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

1 Identification of substance

· **Product details**

· **Trade name** POLYLITE® 32032-00

· **Application of the substance / the preparation** Casting resin

· **Manufacturer/Supplier:**

Reichhold, Inc.
Corporate Headquarters
P.O. Box 13582
Research Triangle Park
NC 27709-3582, USA

Tel +1 919 990 7500

Reichhold UK Ltd.
54/56 Willow Road
Mitcham
Surrey CR4 4NA
England

Tel +44 2086 48 46 84
Fax +44 2086 40 64 32

· **Informing department:** Product Safety Europe/Middle East

· **Emergency information:**

Product Safety Europe/Middle East
Tel +47 33 44 86 00
Fax +47 33 44 86 01

2 Composition/Data on components:

· **Chemical characterization**

· **Description:** Polyester resin

· **Dangerous components:**

CAS: 100-42-5 Styrene 33 ± 2%
EINECS: 202-851-5 Xn; R 10-20-36/38

CAS: 80-62-6 Methyl methacrylate 5 ± 1%
EINECS: 201-297-1 Xi, F; R 11-37/38-43

CAS: 98-83-9 2-phenylpropene < 1%
EINECS: 202-705-0 Xi, N; R 10-36/37-51/53

· **Additional information** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard designation:**



Xn Harmful

· **Information pertaining to particular dangers for man and environment**

R 10 Flammable.
R 20 Harmful by inhalation.
R 36/38 Irritating to eyes and skin.

(contd. on page 2)

— GB —

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 1)

R 43 May cause sensitisation by skin contact.

· **Classification system**

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

· **General information**

Take affected persons into the open air.

Personal protection for the First Aider.

· **After inhalation**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness bring patient into stable side position for transport.

· **After skin contact** Instantly wash with water and soap and rinse thoroughly.

· **After eye contact** Rinse opened eye for several minutes under running water. Then consult doctor.

· **After swallowing**

Rinse mouth with water.

Seek medical treatment.

5 Fire fighting measures

· **Suitable extinguishing agents**

CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol-resistant foam.

· **Protective equipment:**

Wear breathing apparatus.

Do not inhale explosion gases or combustion gases.

6 Accidental release measures

· **Person-related safety precautions:**

Ensure adequate ventilation

Use breathing protection against the effects of fumes/dust/aerosol.

Keep away from ignition sources

· **Measures for environmental protection:**

Do not allow product to reach sewage system or water bodies.

Inform respective authorities in case product reaches water or sewage system.

· **Measures for cleaning/collecting:**

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

· **Handling**

· **Information for safe handling:**

Keep containers tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

(contd. on page 3)

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 2)

Prevent formation of aerosols.

· **Information about protection against explosions and fires:**

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· **Storage**

· **Requirements to be met by storerooms and containers:** No special requirements.

· **Information about storage in one common storage facility:**

Store away from oxidizing agents.

Store away from foodstuffs.

· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed containers.

Protect from heat and direct sunlight.

8 Exposure controls and personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· **Components with critical values that require monitoring at the workplace:**

100-42-5 Styrene

WEL (Great Britain) Short-term value: 1080 mg/m³, 250 ppm

Long-term value: 430 mg/m³, 100 ppm

80-62-6 Methyl methacrylate

WEL (Great Britain) Short-term value: 416 mg/m³, 100 ppm

Long-term value: 208 mg/m³, 50 ppm

98-83-9 2-phenylpropene

WEL (Great Britain) Short-term value: 491 mg/m³, 100 ppm

Long-term value: 246 mg/m³, 50 ppm

TLV (European Union) Short-term value: 492 mg/m³, 100 ppm

Long-term value: 246 mg/m³, 50 ppm

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures**

The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

Use breathing protection in case of insufficient ventilation.

In case of short term exposition use breathing apparatus; in case of intensive or continuous exposition use breathing apparatus with independent air supply.

Filter A

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/substance/preparation.

Check the permeability prior to each renewed use of the glove.

· **Material of gloves**

Fluorocarbon rubber (Viton)

(contd. on page 4)

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 3)

- PVA gloves
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Not suitable are gloves made of the following materials:**
Nitrile rubber, NBR
Natural rubber, NR
PVC gloves
Neoprene gloves
- **Eye protection:** Tightly sealed safety glasses.
- **Body protection:** Protective work clothing.

9 Physical and chemical properties:

- **General Information**
 - **Form:** liquid
 - **Colour:** blue
 - **Odour:** characteristic
- **Change in condition**
 - **Melting point/Melting range:** not determined
 - **Boiling point/Boiling range:** 101 - 164°C
- **Flash point:** 29°C (ISO 3679-83)
- **Ignition temperature:** 430°C (DIN 51794)
- **Self-inflammability:** Product is not self-inflammable.
- **Danger of explosion:** Product is not explosive.
- **Critical values for explosion:**
 - **Lower:** 1.2 Vol %
 - **Upper:** 12.5 Vol %
- **Vapour pressure at 20°C:** 8 hPa
- **Density at 25°C:** 1.10 ± 0.02 g/cm³
- **Solubility in / Miscibility with**
 - **Water:** insoluble
- **pH-value:** not applicable
- **Viscosity:**
 - **dynamic at 25°C:** 300 - 400 mPas (Brookfield)

10 Stability and reactivity

- **Conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions:**
Reacts with peroxides and other radical forming substances
Exothermic polymerisation
- **Dangerous products of composition:**
In case of fire:

(contd. on page 5)

—GB—

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 4)

carbon monoxide and carbon dioxide

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

100-42-5 Styrene

Oral LD50 5000 mg/kg (rat)

Inhalative LC50 (4h) 24 mg/l (rat)

80-62-6 Methyl methacrylate

Oral LD50 8400 mg/kg (rat)

Dermal LD50 > 9400 mg/kg (rabbit)

Inhalative LC50 (4h) 7093 mg/l (rat)

98-83-9 2-phenylpropene

Oral LD50 4500 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant for skin and mucous membranes.
- **on the eye:** Irritant effect.
- **Sensitization:** Sensitization possible by skin contact.

12 Ecological information:

- **Information about elimination (persistence and degradability):**

100-42-5 Styrene

OECD 301C-Test > 60 % (Literature)

80-62-6 Methyl methacrylate

OECD 301D-Test 80-90 % (Literature)

OECD 302B-Test 90-100 % (Literature)

- **Behaviour in environmental systems:**
- **Mobility and bioaccumulation potential:**

100-42-5 Styrene

BCF 13.5 - 64 (Literature)

log Pow 3.16 (Literature)

80-62-6 Methyl methacrylate

BCF 6.59 (calculated)

log Pow 1.38 (Literature)

98-83-9 2-phenylpropene

log Pow 3.265 (Literature)

- **Ecotoxicological effects:**
- **Acquatic toxicity:**

100-42-5 Styrene

LC50 (48h) 23 mg/l (Daphnia magna)

LC50 (96h) 32 mg/l (Pimephales promelas)

80-62-6 Methyl methacrylate

EC50 (48h) 69 mg/l (Daphnia magna)

EC50 (96h) 170 mg/l (Selenastrum capricornutum)

(contd. on page 6)

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 5)

LC50 (96h) 170 mg/l (*Lepomis macrochirus*)**98-83-9 2-phenylpropene**EC/LC10 (18h) 283 mg/l (*Pseudomonas putia*)LC50 (48h) 28 mg/l (*Leuciscus idus*)· **General notes:** Water hazard class 2 (Self-assessment): hazardous for water.

13 Disposal considerations

· **Product:**· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

07 00 00 WASTES FROM ORGANIC CHEMICAL PROCESSES

07 02 00 wastes from the MFSU of plastics, synthetic rubber and man-made fibres

07 02 99 wastes not otherwise specified

· **Uncleaned packagings:**· **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**· **ADR/RID-GGVS/E Class:** 3 Flammable liquids.· **Kemler Number:** 30· **UN-Number:** 1866· **Packaging group:** III· **Label** 3· **Designation of goods:** 1866 RESIN SOLUTION, Special provision 640E· **Maritime transport IMDG/GGVSea:**· **IMDG/GGVSea Class:** 3· **UN Number:** 1866· **Label** 3· **Packaging group:** III· **EmS Number:** F-E,S-E· **Marine pollutant:** No· **Proper shipping name:** RESIN SOLUTION· **Air transport ICAO-TI and IATA-DGR:**· **ICAO/IATA Class:** 3· **UN/ID Number:** 1866· **Label** 3· **Packaging group:** III· **Proper shipping name:** RESIN SOLUTION

— GB —

(contd. on page 7)

MATERIAL SAFETY DATA SHEET

According to 2001/58/EC

Printing date: 07.08.2006

Reviewed on: 23.02.2006

Trade name POLYLITE® 32032-00

(contd. of page 6)

15 Regulatory information

· **Classification according to EC-regulations:**
The product has been classified and labelled in accordance with EC Directives.

· **Code letter and hazard designation of product:**



Xn Harmful

· **Hazard-determining components of labelling:**

Methyl methacrylate
Styrene

· **Risk phrases:**

10 Flammable.
20 Harmful by inhalation.
36/38 Irritating to eyes and skin.
43 May cause sensitisation by skin contact.

· **Safety phrases:**

9 Keep container in a well-ventilated place.
23 Do not breathe fumes/aerosol.
24 Avoid contact with skin.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37 Wear suitable gloves.
60 This material and its container must be disposed of as hazardous waste.

· **National regulations**

· **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant R-phrases**

10 Flammable.
11 Highly flammable.
20 Harmful by inhalation.
36/37 Irritating to eyes and respiratory system.
36/38 Irritating to eyes and skin.
37/38 Irritating to respiratory system and skin.
43 May cause sensitisation by skin contact.
51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Department issuing data specification sheet:** Product Safety Europe/Middle East

· **Contact:**

Product Safety Europe/Middle East
Tel +47 33 44 86 00
Fax +47 33 44 86 01
E-Mail ProductSafety.EU@Reichhold.com