

Printing date 10/09/2015 Reviewed on 03/02/2015

1 Identification

· Product identifier

· Trade name: UretekTM 4S Resin

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

UretekTM
P.O. Box 1394
Tomball, TX 77377

USA

{ICR}: (888) 810-3107 {USA}: (888) 287-3835

uretekicr.com uretekusa.com

· Information department: EH&S Department

· Emergency telephone number:

During normal operating hours: (770) 528-9556

ChemTrec: (800) 424-9300

2 Hazard(s) identification

· Classification of the substance or mixture



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2B H320 Causes eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS07

- · Signal word Warning
- · Hazard statements

Causes skin and eye irritation.

· Precautionary statements

In case of inadequate ventilation wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

(Contd. on page 2)



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 1)

IF ON SKIN: Wash with plenty of soap and water.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 1 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 1 Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous	components:		
25791-96-2	Polyol(s)		7-13%
25265-71-8	oxydipropanol	Acute Tox. 3, H331	≤ 1.0%
· Non-Hazar	dous Components		
	Polyol(s)		15-40%
6846-50-0	2,2,4-Trimethyl-1,3-pentanediol diisobutyrate		15-40%

4 First-aid measures

- · Description of first aid measures
- · General information:

No special measures required.

First Aid responders should pay attention to self-protection and use the recommended protective clothing. If potential for exposure exists refer to Section 8 for specific personal protective quipment.

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Suitable emergency safety shower should be immediately available.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing:

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

· Information for doctor:

Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

· Most important symptoms and effects, both acute and delayed No further relevant information available.

(Contd. on page 3)



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 2)

· Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

- · For safety reasons unsuitable extinguishing agents: Do not use direct water stream. May spread fire.
- · Special hazards arising from the substance or mixture There are no known unusual fire or expolsion hazards.
- · Advice for firefighters
- · Protective equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. PVC boots, gloves, safety helmet and protective clothing should be worn.

· Additional information

Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers. Fight fire from protected location or safe distance. Move container(s) from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage. Contain fire water run-off if possible. Fire water run-off if not contained, may cause environmental damage.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Isolate area. Keep unnecessary and unprotected personnel from entering the area. Spilled material may cause slipping hazard. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

· Environmental precautions:

Prevent from entering into soil or ditches. Inform the relevant authorities if the product has caused environmental pollution.

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

· Methods and material for containment and cleaning up:

Contain spilled material if possible. Absorb with materials such as: Dirt, Sand, Sawdust. Collect in suitable and properly labeled containers. Wash the spill site with water. See Section 13, Disposal Considerations, for additional information.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

No special measures required.

Do not swallow. Wash thoroughly after handling. Keep container closed. See Section 8, Exposure Controls and Personal Protection.

(Contd. on page 4)



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 3)

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Storage Period: 6 months Storage Temp: 15-35 ℃

· Specific end use(s) See the technical data sheet on this product for further information.

8 Exposure controls/personal protection

- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

· Breathing equipment:

In case of brief exposure at low atmospheric levels use an approved air-purifying respiratory equiped with an organic vapor sorbent and a particle filter. In case of intensive or longer exposure use a positive pressure air-supplying respirator (air line or self-contained breathing apparatus).

Protection of hands:

The workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

· Material of gloves

Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and microorganisms. Examples of preferred glove barrier materials include: Butyl rubber, Polyethylene, EVAL, Neoprene, Nitrile, Viton. When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher is recommended.

· 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.

· Eye protection:



Tightly sealed chemical goggles consistent with EN 166 or equivalent. Wear a face-shield which allows use of chemical goggles, or wear full-face respirator to protect face and eyes when there is any likelyhood of splashes.

· Body protection:

Personal protective clothing for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

-US



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 4)

Information on basic physical and	chemical properties
General Information	chemicui properties
Appearance:	
Form:	Liquid
Color:	Yellow
Odor:	Amine-like
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	>100 °C (>212 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density:	Not determined.
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/wat	
Viscosity:	
Dynamic:	Not determined.
	Not determined.
Kinematic:	NOL determined

10 Stability and reactivity

- · Reactivity No further relevant information available.
- Chemical stability This product is stable at recommended storage conditions (See Section 7).
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid Avoid moisture to protect product quality.

(Contd. on page 6)



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 5)

· Incompatible materials:

Avoid contact with oxidizing materials. Avoid contact with: Strong acids. Strong bases. Avoid unintended contact with isocyanates. The reaction of polyols and isocyanates generate heat.

· Hazardous decomposition products: CO and CO2

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

US



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 6)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Smaller quantities can be disposed of with household waste.

Waste Disposal: Incinerate in a licensed facility. Do not discharge into waterways or sewer systems.

Container Disposal: Steel drums must be emptied (as defined by RCRA, Section 261.7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer, or an approved landfill. Drums destined for a scrap dealer or landfill must be punctured or crushed to prevent reuse.

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

Transport information		
· UN-Number · DOT, ADN, IMDG, IATA	not regulated	
· UN proper shipping name · DOT, ADN, IMDG, IATA	not regulated	
· Transport hazard class(es)		
· DOT · Class · ADN/R Class:	DOT Non-Bulk: Not Regulated not regulated not regulated	
· Packing group · DOT, IMDG, IATA	not regulated	
Environmental hazards: Marine pollutant:	No	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.	
· UN "Model Regulation":	not regulated	

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Clean Air Act

None of the ingredients is listed.

· Clean Water Act

None of the ingredients is listed.

- · Sara
- · SARA 302/304 Extremely Hazardous Substance

None of the ingredients is listed.

(Contd. on page 8)



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 7)

· Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Massachusetts Right To Know

57-55-6 propane-1,2-diol

· New Jersey Right To Know

25265-71-8 oxydipropanol

Pennsylvania Right To Know

25265-71-8 oxydipropanol

57-55-6 propane-1,2-diol

· Proposition 65

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Signal word Warning
- · Hazard statements

Causes skin and eye irritation.

· Precautionary statements

In case of inadequate ventilation wear respiratory protection.

Avoid breathing dust/fume/gas/mist/vapors/spray



Printing date 10/09/2015 Reviewed on 03/02/2015

Trade name: UretekTM 4S Resin

(Contd. of page 8)

Wear protective gloves/protective clothing/eye protection/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Call a doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

IF ON SKIN: Wash with plenty of soap and water.

Store in a well-ventilated place. Keep cool.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

UretekTM urges each customer of recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effectivie date shown on this (M)SDS. However, no warranty, express or implied is given. Regulatory reuirements are subject to change and may differ between various locations It is the buyer's/user's responsibility to ensure that his/her activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the produt are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M) SDS, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most curent version.

- · Recommended restriction of use FOR PROFESSIONAL USE ONLY
- · **Department issuing SDS:** Environmental Health & Safety Department.
- · Contact: M. Phillips
- · Date of preparation / last revision 10/09/2015 / -
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

Acute Tox. 3: Acute toxicity, Hazard Category 3

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2B: Serious eye damage/eye irritation, Hazard Category 2B