450 Urethane Topcoat - Clear Part A

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1. Product and Company Identification

Product Code: 450-CLEAR

Product Name: 450 Urethane Topcoat - Clear Part A

Company Name: Key Resin / Flowcrete Phone Number: 4050 Clough Woods Dr. +1 (513)943-4225

4050 Clough Woods Dr. Batavia, OH 45103

Emergency Contact: Chemtrec (USA) (800)424-9300

Chemtrec (International) +1 (703)527-3887

Intended Use: Industrial Maintenance Coatings

2. Hazards Identification

Flammable Liquids, Category 3

Acute Toxicity: Inhalation, Category 4

Serious Eye Damage/Eye Irritation, Category 2A

Skin Corrosion/Irritation, Category 2
Toxic To Reproduction, Category 2







Warning

Warning

Warning

GHS Hazard Phrases: H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H361 - Suspected of damaging fertility or the unborn child .

GHS Precaution Phrases: P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 - Keep container tightly closed.

P241 - Use explosion-proof electrical/ventilating/lighting/.../ equipment.

P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P261 - Avoid breathing mist/vapors/spray.
P264 - Wash hands thoroughly after handling.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P281 - Use personal protective equipment as required.

GHS Response Phrases: P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated

clothing. Rinse skin with water/shower. P352 - Wash with plenty of soap and water.

P333+313 - If skin irritation or rash occurs, seek medical advice/attention.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+313 - If eye irritation

persists, get medical advice/attention.

P403+235 - Store in cool/well-ventilated place.

P308+313 - IF exposed or concerned: Get medical attention/advice.

 ${\sf P301+330+331-IF\ SWALLOWED:\ Rinse\ mouth.\ Do\ NOT\ induce\ vomiting.}$

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

GHS Storage and Disposal

Phrases: P405 - Store locked up.

P501 - Dispose of contents/container to local, state, and federal authority requirements.

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OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

Potential Health EffectsMay cause skin, eye, and respiratory irritation. Substance can be absorbed through the skin in harmful amounts. Signs and symptoms of excessive exposure may be central

nervous system effects such as sleepiness and unconsiousness.

Inhalation: May cause respiratory irritation. Vapors may have a strong offensive odor which may

cause headaches, nausea and vomiting.

Skin Contact: May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May

be harmful if absorbed through the skin.

Eye Contact: Substance causes moderate eye irritation.

Ingestion: May be harmful if swallowed and enters airways.

Medical Conditions Generally Skin disorders, Respiratory disorders, Eye disorders, Skin Allergies.

Aggravated By Exposure:

3. Composition/Information on Ingredients

CAS#	Hazardous Components (Chemical Name)	Concentration
NA	Polyester Resin (Proprietary)	35 - 50 %
108-65-6	Propylene glycol methyl ether acetate	25 - 35 %
1330-20-7	Xylene	10 - 20 %
100-41-4	Ethyl Benzene	<=0.10 %

4. First Aid Measures

Emergency and First Aid

Procedures:

Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination. Use first aid treatment

according to the nature of the injury.

In Case of Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is

difficult, give oxygen. If experiencing respiratory symptoms: Get medical attention

immediately.

In Case of Skin Contact: In case of contact, immediately wash skin with soap and copious amounts of water.

Remove contaminated clothing and shoes. Get medical attention if irritation develops or

persists.

In Case of Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes.

Assure adequate flushing by separating the eyelids with fingers. Remove contact lenses,

if present and easy to do. Continue rinsing. Consult a physician.

In Case of Ingestion: Rinse mouth and then drink plenty of water. Do not induce vomiting. Never induce

vomiting or give anything by mouth if the victim is unconscious or having convulsions.

Immediate medical attention required.

Signs and Symptoms Of

Exposure:

May cause rash on skin, and redness in eyes. May cause coughing by inhalation of a

mist or spray.

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5. Fire Fighting Measures

Flash Pt: ~ 77.00 F (25.0 C)

LEL: NE **Explosive Limits:** UEL: NE

Autoignition Pt: N.E.

Suitable Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Dry

extinguishing media, foam.

Unsuitable Extinguishing

Media:

Do not use a direct water stream, which may spread fire.

Fire Fighting Instructions: Protective Equipment: Wear self-contained breathing apparatus and protective clothing

to prevent contact with skin and eyes.

Flammable Properties and

heat.

Hazards:

6. Accidental Release Measures

Protective Precautions. Protective Equipment and **Emergency Procedures:**

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Where splashing is possible, full chemically resistant protective clothing, and boots are required.

Closed container may rupture (due to build up in pressure) when exposed to extreme

Prevent entry into waterways, sewers, basements or confined areas. **Environmental Precautions:**

Steps To Be Taken In Case Material Is Released Or

Spilled:

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Use personal protective equipment. Remove all sources of ignition. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate the area. Prevent further leakage or spillage if safe to do so. Dike far ahead of spill; use dry sand to contain the flow of material. Use a non-combustible material like vermiculite or sand to soak up the product and place into a container for later disposal. Use clean non-sparking tools to collect absorbed material.

7. Handling and Storage

Precautions To Be Taken in

Handling:

Wear all personal protection required. Wash thoroughly after handling. Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on clothing. When using

multi-component systems, be aware of hazards for all components.

Precautions To Be Taken in

Storing:

Keep away from sources of ignition - No smoking. Store in a tightly closed container.

Protect from sunlight and store in well-ventilated place. Store away from incompatible

Keep away from sources of ignition - No smoking. Keep away from heat, sparks, and Other Precautions:

flame.

8. Exposure Controls/Personal Protection

CAS#	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Polyester Resin (Proprietary)	No data.	No data.	No data.
108-65-6	Propylene glycol methyl ether acetate	No data.	No data.	No data.
1330-20-7	Xylene	PEL: 100 ppm	TLV: 100 ppm STEL: 150 ppm	No data.
100-41-4	Ethyl Benzene	PEL: 100 ppm	TLV: 100 ppm STEL: 125 ppm	No data.

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Respiratory Equipment

Respiratory protection in case of vapor/aerosol release. Combination filter for

(Specify Type): gases/vapors of organic compounds and solid and liquid particles (f.e. EN 14387 Type

A-P2). In isocyanate-containing environments (air-purifying or fresh air-supplied) may be necessary for spray applications or other situations such as high temperature use which

may produce inhalation exposures.

Eye Protection: Safety glasses, or goggles.

Protective Gloves: Nitrile rubber and Neoprene are recommended. Check during use that the gloves are still

retaining their protective properties.

Other Protective Clothing: Where splashing is possible, full chemically resistant protective clothing, safety glasses

or face shield and boots are required.

Engineering ControlsGood general ventilation should be sufficient to control airborne levels.

(Ventilation etc.): Safety shower and eye bath.

Work/Hygienic/Maintenance

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash

Practices: thoroughly

thoroughly after handling.

Environmental Exposure

Controls:

Avoid runoff into storm sewers and ditches which lead to waterways. May be hazardous

to the environment if released in large quantities.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Odor: Solvent odor.

Appearance: Clear.

Melting Point: NE

Boiling Point: No data.

Decomposition Temperature: NE Autoignition Pt: N.E.

Flash Pt: ~ 77.00 F (25.0 C)

Explosive Limits: LEL: NE UEL: NE

Specific Gravity (Water = 1): ~ 1.045 Density: ~ 8.72 LB/GL

Vapor Pressure (vs. Air or

mm Hg):

NE

Vapor Density (vs. Air = 1): NE Evaporation Rate: NE Solubility in Water: NE

Solubility Notes: Partial solubility.

Saturated Vapor NE

Concentration: Percent Volatile:

~ 59 % by weight.

VOC / Volume: NP

10. Stability and Reactivity

Reactivity: Avoid uncontrolled contact with isocyanates.

Stability: Unstable [] Stable [X]

Conditions To Avoid - Extreme temperatures. Heat, flames and sparks.

Instability:

Incompatibility - Materials To Strong oxidizing agents.

Avoid:

Hazardous Decomposition Or Thermal decomposition may produce smoke, carbon monoxide, carbon dioxide.

Byproducts:

Possibility of Hazardous Will occur [] Will not occur [X]

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Polymerization:

Conditions To Avoid -

Will not undergo hazardous polymerization in normal storage conditions.

Hazardous Reactions:

11. Toxicological Information

Toxicological Information: May be harmful if absorbed through the skin.

> CAS# 1330-20-7: Acute toxicity, LD50, Oral, Rat, 4300. MG/KG. Results: Liver: Other changes. Kidney, Ureter, Bladder:Other changes.; AMA Archives of Industrial Health.,

For publisher information, see AEHLAU, Chicago, IL, Vol/p/yr: 14,387, 1956

Acute toxicity, LC50, Inhalation, Rat, 5000. PPM, 4 H. Results: Behavioral: Convulsions

or effect on seizure threshold. Behavioral: Ataxia. Lungs, Thorax, or

Respiration: Dyspnea.; Raw Material Data Handbook, Vol.1: Organic Solvents, 1974., National Assoc. of Printing Ink Research Institute, Francis McDonald Sinclair Memorial

Labor, Lehigh Univ., Bethlehem, PA 18015, Vol/p/yr: 1,123, 1974

Irritation or Corrosion:

Symptoms related to

Toxicological Characteristics: May cause skin, eye, and respiratory irritation.

May cause rash on skin, and redness in eyes. May cause coughing by inhalation of a

mist or spray.

Chronic Toxicological

Effects:

No data available based on mixture itself.

12. Ecological Information

General Ecological

Avoid release to the environment.

Information:

Results of PBT and vPvB

assessment:

No data available.

Persistence and

Not readily biodegradable.

Degradability:

No data available. **Bioaccumulative Potential:** Mobility in Soil: not reported, unknown.

13. Disposal Considerations

Waste Disposal Method: Dispose of this product, product solutions and its container according to federal, state

and local authority requirements. Liquids cannot be disposed of in a landfill. Empty containers may contain product residue. Care should be taken while handling and disposing of empty containers that contain residue. Do not re-use empty containers. Do

not burn, or use a cutting torch on, the empty drum.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: PAINT.

"Limited Quantity" used for 1 gallon containers when shipped in the United States of

America.

3 **DOT Hazard Class:** FLAMMABLE LIQUID

UN1263 **UN/NA Number: Packing Group:**

Warning! Flammable Liquid. Ventilation is normally required when handling or using **Precautionary Label:**

> this product to keep exposure to airborne contaminants below the exposure limit. Vapors or mist may be a fire and explosion hazard when exposed to high temperature or ignition. Ground and bond containers and equipment before transferring to avoid

static sparks. Always read Safety Material Data Sheet before use.

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MARINE TRANSPORT (IMDG/IMO):

PAINT. IMDG/IMO Shipping Name:

1263 Ш **UN Number: Packing Group:**

Hazard Class: 3 - FLAMMABLE LIQUID

IMDG MFAG Number:

No **IMDG EMS Page:**

AIR TRANSPORT (ICAO/IATA):

UN 1263, Paint, 3, PG III. ICAO/IATA Shipping Name:

> Note: The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. Shipment compliance is the responsibility of the person offering

the product for transport.

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	Polyester Resin (Proprietary)	No	No	No
108-65-6	Propylene glycol methyl ether acetate	No	No	No
1330-20-7	Xylene	No	Yes 100 LB	Yes
100-41-4	Ethyl Benzene	No	Yes 1000 LB	Yes

This material meets the EPA [X] Yes [] No Acute (immediate) Health Hazard 'Hazard Categories' defined [X] Yes [] No Chronic (delayed) Health Hazard

for SARA Title III Sections

[X] Yes [] No Fire Hazard

311/312 as indicated: [] Yes [X] No Sudden Release of Pressure Hazard

[] Yes [X] No Reactive Hazard

16. Other Information

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HEALTH **FLAMMABILITY** 3 PHYSICAL 0 PPE Х

HMIS:

Additional Information About CA=CIRCA NA=NOT AVAILABLE NE=NOT ESTABLISHED NR=NOT REGULATED This Product: NP= NOT APPLICABLE PR=PROPRIETARY TS=TRADE SECRET ?=UNKNOWN.

Company Policy or

Hazard Rating System:

The information contained in this MSDS is taken from sources believed to be accurate as Disclaimer: of the date hereof; however the Key Resin Company makes no expressed or implied

warranty in respect to the accuracy of the information or the suitability of the

recommendations, and assumes no liabilities to any user thereof.