471 Polyaspartic Topcoat - Part A

(Clear/Clear OP)

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1. Product and Company Identification

Product Code: 471-CLEAR&OP

Product Name: 471 Polyaspartic Topcoat - Part A (Clear/Clear OP)
Company Name: Key Resin / Flowcrete Phone Number:

4050 Clough Woods Dr. +1 (513)943-4225

Batavia, OH 45103

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

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

Intended Use: Industrial floor coatings.

2. Hazards Identification

Skin Corrosion/Irritation, Category 2 Serious Eye Damage/Eye Irritation, Category 2B Skin Sensitization, Category 1B



GHS Hazard Phrases: H315+320 - Causes skin and eye irritation. H317 - May cause an allergic skin reaction.

H335 - May cause respiratory irritation. H303 - May be harmful if swallowed.

GHS Precaution Phrases: P280 - Wear protective gloves/protective clothing/eye protection. P261 - Avoid breathing

mist/vapours. P264 - Wash hands thoroughly after handling.

GHS Response Phrases: P302+352 - IF ON SKIN: Wash with plenty of soap and water. P332+313 - If skin

irritation occurs, get medical advice/attention.

P362 - Take off contaminated clothing.

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.

P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P314 - Get medical attention/advice if you feel unwell.

P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P311 - Call a

POISON CENTER or doctor/physician.

GHS Storage and Disposal

Phrases:

P403+235 - Store in cool/well-ventilated place. P404 - Store in a closed container.

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

Potential Health Effects Causes skin and eye irritation. May cause skin sensitization, an allergic reaction, which

(Acute and Chronic): becomes evident on reexposure to this material.

Inhalation: May cause respiratory irritation.

Skin Contact: Causes skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: May be harmful if swallowed.

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

Aggravated By Exposure:

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| 3. Composition/Information on Ingredients | | | | |
|---|---|---------------|--|--|
| CAS# | Hazardous Components (Chemical Name) | Concentration | | |
| NA | Secondary Diamines | 75 - 90 % | | |
| 136210-30-5 | Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester | 10 - 20 % | | |
| 67762-90-7 | Siloxanes and silicones, di-me, reaction products with silica | <3.0 % | | |
| 165101-57-5 | Oxazolidine, 3-butyl-2-(1-ethylpentyl)- | 1.0 - 5.0 % | | |
| NA | Flow Agent | <3.0 % | | |

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. Call 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:

Moderate irritation effect.

5. Fire Fighting Measures

Flash Pt: > 200.00 C (392.0 F) Method Used: Pensky-Marten Closed Cup

Explosive Limits: LEL: NE UEL: NE

Autoignition Pt: No data.

Suitable Extinguishing Media: Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing

Media:

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

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

to prevent contact with skin and eyes.

Flammable Properties and

Fire Fighting Instructions:

Hazards:

Product is not considered a fire hazard. Closed containers may rupture (due to build up

in pressure) when exposed to extreme heat.

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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.

Environmental Precautions:

Prevent entry into waterways, sewers, basements or confined areas. PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL.

Steps To Be Taken In Case Material Is Released Or

Absorb with sand or vermiculite and place in closed containers for disposal. Ventilate the

area.

7. Handling and Storage

Precautions To Be Taken in

Handling:

Provide adequate ventilation. Do not breathe vapor. Do not get in eyes, on skin or on

clothing.

Precautions To Be Taken in

Keep container tightly closed in a dry and well-ventilated place.

Storing:

Spilled:

Other Precautions: Wash thoroughly after handling.

8. Exposure Controls/Personal Protection

| CAS# | Partial Chemical Name | OSHA TWA | ACGIH TWA | Other Limits |
|-------------|--|----------|-----------|--------------|
| NA | Secondary Diamines | No data. | No data. | No data. |
| 136210-30-5 | Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl) bis-, tetraethyl ester | No data. | No data. | No data. |
| 67762-90-7 | Siloxanes and silicones, di-me, reaction products with silica | No data. | No data. | No data. |
| 165101-57-5 | Oxazolidine, 3-butyl-2-(1-ethylpentyl)- | No data. | No data. | No data. |
| NA | Flow Agent | No data. | No data. | No data. |

Respiratory Equipment (Specify Type):

Normally when good engineering controls are used, no respiratory protection is needed. However, if cured product is abraded by sanding or grinding use a NIOSH approved air-purifying respirator. Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye Protection: Safety glasses, or goggles.

Protective Gloves: Nitrile rubber and Neoprene are recommended.

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

or face shield and boots are required.

Engineering Controls (Ventilation etc.):

Good general ventilation should be sufficient to control airborne levels. Safety shower

and eye bath.

Work/Hygienic/Maintenance Practices:

Wash contaminated clothing before reuse. Discard contaminated shoes. Wash

thoroughly after handling.

Environmental Exposure

Controls:

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

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| 9. Ph | ysical | and (| Chemic | cal Pr | operties |
|-------|--------|-------|--------|--------|----------|
|-------|--------|-------|--------|--------|----------|

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

Appearance and Odor: Odor: Mild.

Appearance: Clear.

Melting Point: NE **Boiling Point:** NE **Decomposition Temperature: NE**

Autoignition Pt: No data.

Flash Pt: > 200.00 C (392.0 F) Method Used: Pensky-Marten Closed Cup

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

Specific Gravity (Water = 1): ~ 1.067 ~ 8.9 LB/GL Density:

Vapor Pressure (vs. Air or

mm Hg):

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

Concentration:

~ 5 % by weight. Percent Volatile:

VOC / Volume: ΝE

10. Stability and Reactivity

Strong oxidizing agents, Nitric Acids. acids. Reactivity:

Unstable [] Stable [X] Stability:

Conditions To Avoid -

Instability:

Extreme temperatures.

Incompatibility - Materials To Avoid strong acids, bases, and oxidizing agents. Nitrous acid and other nitrosating

Avoid: agents.

Hazardous Decomposition Or In a fire, product may produce the following: Carbon monoxide, Carbon dioxide, and

Amines. Byproducts:

Possibility of Hazardous

Will occur []

Will not occur [X]

Polymerization:

Conditions To Avoid -Will not undergo hazardous polymerization in normal storage conditions.

Hazardous Reactions:

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11. Toxicological Information

Toxicological Information: No data available.

Irritation or Corrosion: Skin Irritation. Irritating to eyes.

Chronic Toxicological

No data available.

Effects:

12. Ecological Information

General Ecological

Avoid release to the environment.

Information:

Results of PBT and vPvB

No data available.

assessment:

Persistence and No data available.

Degradability:

Bioaccumulative Potential: No data available.

Mobility in Soil: not reported, unknown.

13. Disposal Considerations

Waste Disposal Method: Incinerate or dispose of unused material, residues and containers in a licensed facility in

accordance with all applicable local, state and federal regulations. Do not discharge

substance/product into sewage system.

14. Transport Information

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated.

DOT Hazard Class: UN/NA Number:

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Not Regulated.

MARINE TRANSPORT (IMDG/IMO):

IMDG/IMO Shipping Name: Not Regulated.

UN Number: Packing Group:

Hazard Class:

IMDG MFAG Number:

IMDG EMS Page: No

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not Regulated.

15. Regulatory Information

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

| CAS# | AS # Hazardous Components (Chemical Name) | | S. 304 RQ | S. 313 (TRI) | |
|-------------|---|----|-----------|--------------|--|
| NA | Secondary Diamines | No | No | No | |
| 136210-30-5 | Aspartic acid, N,N'-(methylenedi-4,1-cyclohexanediyl)bis-, tetraethyl ester | No | No | No | |
| 67762-90-7 | 2-90-7 Siloxanes and silicones, di-me, reaction products with silica | | No | No | |
| 165101-57-5 | Oxazolidine, 3-butyl-2-(1-ethylpentyl)- | No | No | No | |
| NA | Flow Agent | No | No | No | |

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

16. Other Information

Revision Date: 06/12/2020

Hazard Rating System:



HMIS:

This Product:

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

Company Policy or

Disclaimer:

The information contained in this MSDS is taken from sources believed to be accurate as 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.