



MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name AKWASEAL™ HC
Version # 05
Revision date 24-February-2011
Chemical description Liquid
CAS # Mixture
Manufacturer information CETCO
Building Materials Group
2870 Forbs Avenue
Hoffman Estates, IL 60192 US
safety.data@amcol.com
<http://www.cetco.com/>
General Information (800) 527-9948
CHEMTREC® (800) 424-9300

2. Hazards Identification

Emergency overview Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact. Prolonged or repeated exposure increases the risk.

Potential health effects

Routes of exposure Inhalation. Skin contact.

Eyes Irritating to eyes. Symptoms include itching, burning, redness and tearing.

Skin Substance causes moderate skin irritation. May cause sensitization by skin contact.

Inhalation May cause irritation of respiratory tract. May cause sensitization by inhalation.

Ingestion Irritating to mouth, throat, and stomach. Ingestion of this product may cause nausea, vomiting and diarrhea.

Signs and symptoms Cough. Discomfort in the chest. Shortness of breath.

3. Composition / Information on Ingredients

| Components | CAS # | Percent |
|--|-----------|---------|
| POLYMETHYLENE POLYPHENYLENE ISOCYANATE | 9016-87-9 | 30 - 60 |
| PROPYLENE CARBONATE | 108-32-7 | 15 - 40 |

Composition comments This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 20 minutes. Get medical attention if irritation develops or persists.

Skin contact Wash off immediately with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops or persists.

Inhalation Move to fresh air. Oxygen or artificial respiration if needed. Get medical attention immediately.

Ingestion If material is ingested, immediately contact a physician or poison control center. Do not induce vomiting without medical advice. If swallowed, rinse mouth with water (only if the person is conscious).

Notes to physician Symptoms may be delayed. Keep under medical supervision for at least 48 hours. Provide general supportive measures and treat symptomatically.

General advice Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire Fighting Measures

Flammable properties Containers may explode when heated.

| | |
|--|--|
| Extinguishing media | |
| Suitable extinguishing media | Carbon dioxide (CO ₂). Alcohol foam. Water spray. Dry chemical. Foam. |
| Protection of firefighters | |
| Protective equipment for firefighters | In the event of fire, wear self-contained breathing apparatus. |
| Fire fighting equipment/instructions | Move containers from fire area if you can do it without risk. Do not scatter spilled material with high pressure water streams. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. ALWAYS stay away from tanks engulfed in flame. Cool containers with flooding quantities of water until well after fire is out. |
| Specific methods | In the event of fire, cool tanks with water spray. Use water spray to cool unopened containers. |

6. Accidental Release Measures

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| Personal precautions | Ensure adequate ventilation. Use personal protective equipment. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. |
| Environmental precautions | Prevent further leakage or spillage if safe to do so. |
| Methods for containment | Stop leak if you can do so without risk. Dike the spilled material, where this is possible. |
| Methods for cleaning up | Dike far ahead of liquid spill for later disposal. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After removal flush contaminated area thoroughly with water. Ventilate the contaminated area. |

7. Handling and Storage

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|-----------------|---|
| Handling | Wash hands after handling and before eating. When using do not eat or drink. Avoid contact with skin and eyes. Do not get this material in your eyes, on your skin, or on your clothing. Do not handle or store near an open flame, heat or other sources of ignition. |
| Storage | Keep locked-up. Keep out of the reach of children. Keep this material away from food, drink and animal feed. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Keep away from heat, sparks, and flame. |

8. Exposure Controls / Personal Protection

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|--------------------------------------|--|
| Engineering controls | Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. If these are not sufficient to maintain concentrations of particulates and solvent vapor below the OEL, suitable respiratory protection must be worn. |
| Personal protective equipment | |
| Eye / face protection | Wear safety glasses with side shields (or goggles) and a face shield. |
| Skin protection | Where contact is likely, wear chemical-resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield. Use of butyl rubber or nitrile gloves is recommended |
| Respiratory protection | When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Wear a NIOSH-approved (or equivalent) full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. |

9. Physical & Chemical Properties

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|---|------------------|
| Appearance | Not available. |
| Color | Brown. |
| Odor | Slightly. Musty. |
| Odor threshold | Not available. |
| Physical state | Not available. |
| Form | Liquid. |
| pH | Not available. |
| Melting point/Freezing point | Not available. |
| Boiling point | Not available. |
| Flash point | Not available. |
| Evaporation rate | Not available. |
| Flammability limits in air, upper, % by volume | Not available. |

| | |
|---|------------------------------------|
| Flammability limits in air, lower, % by volume | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Specific gravity | Not available. |
| Relative density | 0.8881 g/cm ³ estimated |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| Viscosity | 120 - 150 cps |

10. Chemical Stability & Reactivity Information

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|---|---|
| Chemical stability | Stable at normal conditions. No hazards to be especially mentioned. |
| Conditions to avoid | Direct sources of heat. Keep away from water. |
| Incompatible materials | This product may react with strong oxidizing agents. Reaction with water may generate much heat which will increase the concentration of fumes in the air. |
| Hazardous decomposition products | Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. and hydrogen cyanide (hydrocyanic acid) |
| Possibility of hazardous reactions | Hazardous polymerization can occur with elevated temperatures. Hazardous polymerization can occur with contact with alkalies. Hazardous polymerization can occur with metallic catalysts. |

11. Toxicological Information

Toxicological data

| Product | Test Results |
|---|--|
| AKWASEAL™ HC (Mixture) | Acute Dermal LD50 Rabbit: 15644 mg/kg estimated Acute Dermal LD50 Rat: 15644 mg/kg Acute Inhalation LC50 Rat: 4 mg/l/4h Acute Oral LD50 Rabbit: 76.67 ml/kg estimated Acute Oral LD50 Rat: 53316 mg/kg |
| Components | Test Results |
| PROPYLENE CARBONATE (108-32-7) | Acute Dermal LD50 Rabbit: 20000 mg/kg Acute Oral LD50 Rabbit: >= 20 ml/kg Acute Oral LD50 Rat: 29000 mg/kg |
| POLYMETHYLENE POLYPHENYLENE ISOCYANATE (9016-87-9) | Acute Dermal LD50 Rabbit: 9400 mg/kg Acute Inhalation LC50 Rat: 490 mg/l/4h Acute Oral LD50 Rat: 49000 mg/kg |
| Sensitization | May cause sensitization by inhalation and skin contact. |
| Local effects | Harmful by inhalation. Irritating to respiratory system and skin. |
| Chronic effects | Repeated or prolonged contact causes sensitization, asthma and eczemas. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| Carcinogenicity | Not listed by ACGIH, IARC, NIOSH, NTP OR OSHA. |
| IARC Monographs. Overall Evaluation of Carcinogenicity | |
| POLYMETHYLENE POLYPHENYLENE ISOCYANATE (CAS 9016-87-9) | 3 Not classifiable as to carcinogenicity to humans. |
| Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Further information | Persons allergic to isocyanates, and particularly those suffering from asthma or other respiratory conditions, should not work with isocyanates. |

12. Ecological Information

Ecotoxicological data

Product

AKWASEAL™ HC (Mixture)

Test Results

EC50 Daphnia: >= 1000 mg/l 24.00 Hours

LC50 Fish: >= 1000 mg/l

Components

PROPYLENE CARBONATE (108-32-7)

Test Results

EC50 Daphnia: 500 mg/L 48.00 Hours

IC50 Algae: 500 mg/L 72.00 Hours

LC50 Fish: 2200 mg/L 96.00 Hours

Ecotoxicity

Components of this product have been identified as having potential environmental concerns.

Environmental effects

We have no quantitative data concerning the ecological effects of this product.

Persistence and degradability

Not available.

13. Disposal Considerations

Disposal instructions

Dispose in accordance with all applicable regulations.

14. Transport Information

TDG

Proper shipping name

WATER-REACTIVE LIQUID, N.O.S., SOLUTION (POLYMETHYLENE POLYPHENYLENE ISOCYANATE)

Hazard class

4.3

UN number

UN3148

Packing group

III

Special provisions

16



TDG

15. Regulatory Information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status

Controlled

WHMIS classification

D1A - Immediate/Serious-VERY TOXIC

D2A - Other Toxic Effects-VERY TOXIC

D2B - Other Toxic Effects-TOXIC

WHMIS labeling



Inventory status

Country(s) or region

Australia

Canada

Canada

China

Europe

Inventory name

Australian Inventory of Chemical Substances (AICS)

Domestic Substances List (DSL)

Non-Domestic Substances List (NDSL)

Inventory of Existing Chemical Substances in China (IECSC)

European Inventory of Existing Commercial Chemical Substances (EINECS)

On inventory (yes/no)*

No

No

No

No

No

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | No |
| New Zealand | New Zealand Inventory | No |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | No |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

Recommended restrictions

Workers (and your customers or users in the case of resale) should be informed of the potential presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required under applicable regulations.

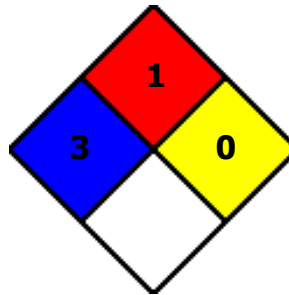
Further information

This safety datasheet only contains information relating to safety and does not replace any product information or product specification.

HMIS ratings

| | | | | |
|---------------------|--|--|---|---|
| HEALTH | | | * | 3 |
| FLAMMABILITY | | | | 1 |
| PHYSICAL HAZARD | | | | 1 |
| PERSONAL PROTECTION | | | | |

NFPA ratings



Disclaimer

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Issue date

24-February-2011