MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**AKWASEAL™ LV**
Revision date	07-11-2007
CAS #	Mixture
Company information	CETCO Building Materials Group One North Arlington 1500 West Shure Drive Arlington Heights, IL 60004 USA
Emergency	CHEMTREC (800) 424-9300
General information	(800) 527-9948

2. Hazards Identification

Emergency overview	Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation and skin contact.
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	40 - 60
Non-hazardous and other components below reportable levels		40 - 60

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

Unusual fire & explosion hazards	Containers may explode when heated.
Extinguishing media	
Suitable extinguishing media	Carbon dioxide (CO2). Alcohol foam. Water spray. Dry chemical. Foam.

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.

6. Accidental Release Measures

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

Handling	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

Exposure guidelines

Canada - Alberta - Occupational Exposure Limits - TWAs

POLYMETHYLENE POLYPHENYLENE ISOCYANATE	9016-87-9	0.005 Ppm TWA; 0.07 mg/m3 TWA

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.
General hygiene considerations	Keep away from food and drink. When using do not smoke. Use good industrial hygiene practices in handling this material. Eye wash fountain and emergency showers are recommended.

9. Physical & Chemical Properties

Color	Brown.
Form	Liquid.
Odor	Slightly. Musty.
Odor threshold	Not available
Physical state	Liquid
pH	Not available
Melting point	50.0 °F (10 °C) estimated
Freezing point	Not available
Boiling point	Not available
Flash point	249.8 °F (121 °C) estimated Closed Cup
Evaporation rate	Not available

Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.09 - 1.11
Solubility (H2O)	Insoluble
Octanol/H2O coeff	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	300 - 400 cps

10. Chemical Stability & Reactivity Information

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)
Hazardous polymerization	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

Routes of exposure	Inhalation. Skin contact.
Acute effects	Acute LD50: 17212 mg/kg estimated, Rat, Oral Acute LD50: 17091 mg/kg estimated, Rat, Dermal Acute LC50: 4 mg/l/4h estimated, Rat, Inhalation
Local effects	Harmful by inhalation. Irritating to respiratory system and skin.

Component analysis - LD50

Toxicology Data - Selected LD50s and LC50s

POLYMETHYLENE POLYPHENYLENE ISOCYANATE	9016-87-9	Inhalation LC50 Rat: 490 mg/m3/4H; Oral LD50 Rat: 49 g/kg; Dermal LD50 Rabbit: >9400 mg/kg

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.
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

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.

13. Disposal Considerations

Disposal instructions	Dispose in accordance with all applicable regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations

OSHA Process Safety Standard: This material is not known to be hazardous by the OSHA Highly Hazardous Process Safety Standard, 29 CFR 1910.119.

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

POLYMETHYLENE POLYPHENYLENE ISOCYANATE	9016-87-9	1.0 % De minimis concentration (listed under Chemical Category N120, Diisocyanates)

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical Yes

State regulations

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical Yes

CERCLA (Superfund) reportable quantity None

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	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (CCS)	No
Europe	European Inventory of New and Existing Chemicals (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Korean Inventory of Chemicals (KICS)	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

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

NFPA ratings

Health: 3
Flammability: 1
Instability: 0

Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The manufacturer expressly does not make any representations, warranties, or guarantees as to its accuracy, reliability or completeness nor assumes any liability, for its use. It is the user's responsibility to verify the suitability and completeness of such information for each particular use. Third party materials: Insofar as materials not manufactured or supplied by this manufacturer are used in conjunction with, or instead of this product, it is the responsibility of the customer to obtain, from the manufacturer or supplier, all technical data and other properties relating to these and other materials and to obtain all necessary information relating to them. No liability can be accepted in respect of the use of this product in conjunction with materials from another supplier.
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