



Material Safety Data Sheet

Material Name: APAC 989

ID: SAH00857

*** Section 1 - Chemical Product and Company Identification ***

Material Name: APAC 989

Product Use

Flooring Adhesive

Manufacturer Information

MAPEI Corporation

1144 East Newport Center Drive

Deerfield Beach, Florida 33442

Customer Service

Phone: 1-800-747-2722

Fax: 706-277-4157

www.apacadhesives.com

apac@apacadhesives.com

IN THE EVENT OF A CHEMICAL EMERGENCY INVOLVING A SPILL, LEAK, FIRE, EXPLOSION, EXPOSURE OR ACCIDENT, CONTACT THE FOLLOWING NUMBERS:

Emergency 24 hour numbers:

(USA) CHEMTREC 1-800-424-9300

(Canada) CANUTEC 1-631-996-6666

*** Section 2 - Hazards Identification ***

Emergency Overview

This product has been evaluated using criteria specified in 29CFR 1910.1200 (Hazard Communication Standard). This product may cause sensitization by inhalation and skin contact. This product is irritating to the eyes, respiratory system and skin.

Hazard Statements

CAUTION! ALLERGEN. IRRITANT. May cause sensitization by inhalation and skin contact. Irritating to eyes, respiratory system and skin. Vapor harmful. Wear suitable gloves, eye/face protection, and respiratory protection. Keep out of the reach of children.

Potential Health Effects: Eyes

This product is irritating to the eyes.

Potential Health Effects: Skin

This product is irritating to the skin. Prolonged contact with this product may cause allergic skin sensitization reactions.

Potential Health Effects: Ingestion

Ingestion of this product may cause nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

This product is irritating to the respiratory system. This product may cause sensitization by inhalation.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

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Potential Environmental Effects

None identified.

HMIS Ratings: Health: 2* Fire: 0 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, synthetic apron, NIOSH respirator if airborne concentrations exceed exposure limits

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

CAS #	Component	Percent
68083-75-0	Urethane Polymer	10-30
1305-78-8	Calcium oxide	7-13
Proprietary	NJTSRN 5010110	5-10
101-68-8	Methylene bisphenol isocyanate (MDI)	1-5
6422-86-2	1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	1-5
57-11-4	Stearic acid	0.5-1.5

*** Section 4 - First Aid Measures ***

First Aid: Eyes

Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

First Aid: Skin

Flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion

Flush out mouth with water. If ingestion of a large amount does occur, seek medical attention. Do not induce vomiting.

First Aid: Inhalation

Immediately remove the affected person to fresh air. If symptoms persist, get medical attention.

First Aid: Notes to Physician

Provide general supportive measures and treat symptomatically.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards

See Section 9 for Flammability Properties.

This product is an aqueous mixture which will not burn. If evaporated to dryness, the solid residue may pose a moderate fire hazard.

Hazardous Combustion Products

Irritating and toxic gases or fumes may be released during a fire. Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

Extinguishing Media

Dry chemical (preferred), foam, water.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

NFPA Ratings: Health: 2 Fire: 0 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

*** Section 6 - Accidental Release Measures ***

Personal Precautions

Wear appropriate protective equipment and clothing during clean-up.

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Containment Procedures

Dike the spilled material, where this is possible. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. Scoop up used absorbent into drums or other appropriate container.

Environmental Precautions

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Clean-Up Procedures

Attempt to reclaim the free product, if this is possible. Shovel the material into waste container. Thoroughly wash the area with water after a spill or leak clean-up. Keep out of the reach of children.

Evacuation Procedures

None identified.

Special Procedures

Regulations vary. Consult local authorities before disposal.

* * * Section 7 - Handling and Storage * * *

Handling Procedures

Avoid getting this material into contact with your skin and eyes. Avoid breathing vapors or mists of this product. Wash hands after handling and before eating. Keep out of the reach of children.

Storage Procedures

Keep the container tightly closed. Store in a cool, dry, well-ventilated area. Store at ambient temperature and atmospheric pressure. Keep out of sun.

* * * Section 8 - Exposure Controls / Personal Protection * * *

A: Component Exposure Limits

Calcium oxide (1305-78-8)

ACGIH:	2 mg/m3 TWA
OSHA:	5 mg/m3 TWA
NIOSH:	2 mg/m3 TWA
Alberta:	2 mg/m3 TWA
British Columbia:	2 mg/m3 TWA
Manitoba:	2 mg/m3 TWA
New Brunswick:	2 mg/m3 TWA
NW Territories:	2 mg/m3 TWA 4 mg/m3 STEL
Nova Scotia:	2 mg/m3 TWA
Nunavut:	2 mg/m3 TWA 4 mg/m3 STEL
Ontario:	2 mg/m3 TWA
Quebec:	2 mg/m3 TWAEV
Saskatchewan:	4 mg/m3 STEL 2 mg/m3 TWA
Yukon:	4 mg/m3 STEL 2 mg/m3 TWA

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Methylene bisphenol isocyanate (MDI) (101-68-8)

ACGIH:	0.005 ppm TWA
OSHA:	0.02 ppm Ceiling; 0.2 mg/m ³ Ceiling
NIOSH:	0.005 ppm TWA; 0.05 mg/m ³ TWA 0.020 ppm Ceiling (10 min); 0.2 mg/m ³ Ceiling (10 min)
Alberta:	0.005 ppm TWA; 0.05 mg/m ³ TWA
British Columbia:	Sensitizer 0.005 ppm TWA 0.01 ppm Ceiling Skin notation
Manitoba:	0.005 ppm TWA
New Brunswick:	0.005 ppm TWA; 0.051 mg/m ³ TWA
NW Territories:	0.02 ppm Ceiling; 0.2 mg/m ³ Ceiling
Nova Scotia:	0.005 ppm TWA
Nunavut:	0.02 ppm Ceiling; 0.2 mg/m ³ Ceiling
Ontario:	0.005 ppm TWA (listed under Isocyanates, organic compounds); 0.02 ppm Ceiling (listed under Isocyanates, organic compounds) 0.005 ppm TWA (designated substance regulation, listed under Isocyanates, organic compounds); 0.005 ppm TWA (applies to workplaces to which the designated substance regulation does not apply) 0.02 ppm Ceiling (designated substances regulation)
Quebec:	0.005 ppm TWAEV; 0.051 mg/m ³ TWAEV
Saskatchewan:	0.015 ppm STEL 0.005 ppm TWA
Yukon:	0.02 ppm Ceiling; 0.2 mg/m ³ Ceiling

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields. Wear chemical goggles; face shield (if splashing is possible).

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. This product may cause sensitization by skin contact.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. This product may cause sensitization by inhalation.

Personal Protective Equipment: General

Laundry contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

* * * Section 9 - Physical & Chemical Properties * * *

Appearance:	Beige paste	Odor:	Odorless
Physical State:	Paste	pH:	N/A
Vapor Pressure:	N/A	Vapor Density:	N/A
Boiling Point:	N/A	Melting Point:	N/A
Solubility (H₂O):	Insoluble	Specific Gravity:	1.4 - 1.7
Evaporation Rate:	N/A	VOC:	37 g/L
Octanol/H₂O Coeff.:	N/A	Flash Point:	>200 F (93° C)
Flash Point Method:	CC	Upper Flammability Limit (UFL):	N/A
Lower Flammability Limit (LFL):	N/A	Burning Rate:	N/A
Auto Ignition:	N/A		

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Physical Properties: Additional Information

The data provided in this section is to be used for product safety handling purposes. Please refer to Product Data Sheets, Certificates of Conformity or Certificates of Analysis for chemical and physical data for determinations of quality and for formulation purposes.

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Chemical Stability

Stable under normal conditions.

Chemical Stability: Conditions to Avoid

Do not freeze.

Incompatibility

This product may react with strong acids, bases and oxidizing agents.

Hazardous Decomposition

Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. Upon decomposition, this product may emit fumes of carbon monoxide, carbon dioxide, oxides of nitrogen, and other organic compounds.

Possibility of Hazardous Reactions

Will not occur.

* * * Section 11 - Toxicological Information * * *

Acute Dose Effects

A: General Product Information

No information available for the product.

B: Component Analysis - LD50/LC50

Calcium oxide (1305-78-8)

Oral LD50 Rat 500 mg/kg

Methylene bisphenol isocyanate (MDI) (101-68-8)

Oral LD50 Rat 9200 mg/kg

Stearic acid (57-11-4)

Dermal LD50 Rabbit >5 g/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Methylene bisphenol isocyanate (MDI) (101-68-8)

IARC:	Monograph 71 [1999]; Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))
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Sensitization

This product may cause sensitization by inhalation and skin contact.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

No information available for the product.

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B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Calcium oxide (1305-78-8)

Test & Species		Conditions
96 Hr LC50 Cyprinus carpio	1070 mg/L [static]	

*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

No additional information available.

B: Component Waste Numbers

No EPA Waste Numbers are applicable for this product's components.

Disposal Instructions

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

*** Section 14 - Transportation Information ***

International Transportation Regulations

Not regulated as dangerous goods.

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All of the components of this product are listed on, or are exempted from listing on the U.S. EPA TSCA Inventory of Chemical Substances. All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List unless otherwise noted.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Methylene bisphenol isocyanate (MDI) (101-68-8)

SARA 313:	1.0 % de minimis concentration (listed under Chemical Category N120, Diisocyanates)
CERCLA:	5000 lb final RQ; 2270 kg final RQ

State Regulations

A: General Product Information

Other state regulations may apply. Check individual state requirements.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Calcium oxide	1305-78-8	Yes	Yes	Yes	Yes	Yes	Yes
Methylene bisphenol isocyanate (MDI)	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):
WARNING! This product contains trace amounts of a chemical known to the state of California to cause cancer.

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Canadian WHMIS Information

A: General Product Information



B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Calcium oxide	1305-78-8	1 %
Methylene bisphenol isocyanate (MDI)	101-68-8	0.1 %

Additional Regulatory Information

A: General Product Information

Supplier(s) of proprietary component(s) state that these components are contained on the TSCA inventory.

B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Calcium oxide	1305-78-8	Yes	DSL	EINECS
NJTSRN 5010110	Proprietary	Yes	DSL	EINECS
Methylene bisphenol isocyanate (MDI)	101-68-8	Yes	DSL	EINECS
1,4-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	6422-86-2	Yes	DSL	EINECS
Stearic acid	57-11-4	Yes	DSL	EINECS

* * * Section 16 - Other Information * * *

Reference

T1-1829-53

Other Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

Key/Legend

NA = Not available or Not Applicable. ACGIH = American Conference of Governmental Industrial Hygienists. NFPA = National Fire Protection Association. EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.

Contact: Product Safety Specialist

Contact Phone: 1-954-246-8888

End of Sheet SAH00857