



Material Safety Data Sheet

Material Name: ULTRABOND 4085

ID: SAH00268

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

Material Name: ULTRABOND 4085

Product Use

Sealer

Manufacturer Information

USA and Puerto Rico

MAPEI

1144 East Newport Center Drive

Deerfield Beach, FL 33442

Phone: 1-954-246-8888

Canada

MAPEI

2900 Francis-Hughes Avenue

Laval, QC H7L 3J5

Phone: 1-450-662-1212

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). Extremely flammable; material will readily ignite at normal temperatures. This product is irritating to the eyes.

Hazard Statements

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR - VAPOR MAY CAUSE FLASH FIRE. IRRITANT. VAPOR HARMFUL. HARMFUL OR FATAL IF SWALLOWED. Irritating to eyes. Vapor accumulation can flash or explode when ignited. 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. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

Potential Health Effects: Skin

Prolonged and/or repeated skin contact with this product may cause irritation/dermatitis.

Potential Health Effects: Ingestion

Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Potential Health Effects: Inhalation

Excessive inhalation of this material causes headache, dizziness, nausea and incoordination. This product is an asphyxiant gas which can cause unconsciousness/death if OXYGEN levels are sufficiently reduced.

Medical Conditions Aggravated by Exposure

Hypersensitivity to product, allergies, and skin or respiratory disorders

Potential Environmental Effects

No information available for the product.

HMIS Ratings: Health: 2 Fire: 3 Reactivity: 0 Pers. Prot.: Safety glasses, gloves, synthetic apron, vapor 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
110-54-3	Hexane	10-30
64742-49-0	Naphtha, petroleum, hydrotreated light	10-30

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108-88-3	Toluene	10-30
Proprietary	Elastomeric polymer	7-13
67-64-1	Acetone	7-13
78-93-3	Methyl ethyl ketone	7-13
Proprietary	Phenolic resin	3-7
1309-48-4	Magnesium oxide	0.5-1.5

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

First Aid: Eyes

Get medical attention or advice. In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes.

First Aid: Skin

Get medical attention or advice. For skin contact flush with large amounts of water.

First Aid: Ingestion

If the material is swallowed, get immediate medical attention or advice.

First Aid: Inhalation

Get medical attention or advice. If inhaled, immediately remove the affected person to fresh air. If the affected person is not breathing, apply artificial respiration.

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.

Extremely dangerous fire and explosion hazard. Vapors may be ignited by flame, sparks or contact with any hot surface (light bulb or steam pipes) under normal atmospheric conditions. Forms explosive mixtures with air.

Vapors are heavier than air and may travel along the ground to some distant source of ignition and flash back.

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

Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.

NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0

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

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

Personal Precautions

Eliminate ignition sources including sources of electrical, static or frictional sparks.

Containment Procedures

Contain the discharged material.

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. Thoroughly wash the area with water after a spill or leak clean-up. Wear appropriate protective equipment and clothing during clean-up. Keep out of the reach of children.

Evacuation Procedures

Isolate area. Keep unnecessary personnel away.

Special Procedures

Wear appropriate protective equipment and clothing during clean-up.

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

Handling Procedures

Keep this product from heat, sparks, or open flame. Use only in well ventilated areas. Avoid breathing vapors or mists of this product. Avoid getting this material into contact with your skin and eyes. Keep out of the reach of children.

Storage Procedures

Do not handle or store near an open flame, heat or other sources of ignition. Store in a cool, dry, well-ventilated area. Keep the container tightly closed.

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

A: Component Exposure Limits

Hexane (110-54-3)

ACGIH:	Skin - potential significant contribution to overall exposure by the cutaneous route 50 ppm TWA
OSHA:	500 ppm TWA; 1800 mg/m3 TWA
NIOSH:	50 ppm TWA; 180 mg/m3 TWA
Alberta:	50 ppm TWA; 176 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia:	20 ppm TWA Skin notation
Manitoba:	50 ppm TWA
New Brunswick:	50 ppm TWA; 176 mg/m3 TWA
NW Territories:	100 ppm TWA; 352 mg/m3 TWA 125 ppm STEL; 440 mg/m3 STEL
Nova Scotia:	50 ppm TWA Skin - potential significant contribution to overall exposure by the cutaneous route
Nunavut:	100 ppm TWA; 352 mg/m3 TWA 125 ppm STEL; 440 mg/m3 STEL
Ontario:	50 ppm TWAEV; 176 mg/m3 TWAEV
Quebec:	50 ppm TWAEV; 176 mg/m3 TWAEV Skin designation
Saskatchewan:	62.5 ppm STEL 50 ppm TWA
Yukon:	125 ppm STEL; 450 mg/m3 STEL 100 ppm TWA; 360 mg/m3 TWA

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Toluene (108-88-3)

ACGIH:	20 ppm TWA
OSHA:	200 ppm TWA 300 ppm Ceiling
NIOSH:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL
Alberta:	50 ppm TWA; 188 mg/m3 TWA Substance may be readily absorbed through intact skin
British Columbia:	Adverse reproductive effect 20 ppm TWA
Manitoba:	20 ppm TWA
New Brunswick:	50 ppm TWA; 188 mg/m3 TWA Skin - potential for cutaneous absorption
NW Territories:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Nova Scotia:	20 ppm TWA
Nunavut:	100 ppm TWA; 375 mg/m3 TWA 150 ppm STEL; 560 mg/m3 STEL Skin notation
Ontario:	20 ppm TWAEV
Quebec:	50 ppm TWAEV; 188 mg/m3 TWAEV Skin designation
Saskatchewan:	60 ppm STEL 50 ppm TWA
Yukon:	Skin notation 150 ppm STEL; 560 mg/m3 STEL 100 ppm TWA; 375 mg/m3 TWA

Acetone (67-64-1)

ACGIH:	750 ppm STEL 500 ppm TWA
OSHA:	1000 ppm TWA; 2400 mg/m3 TWA
NIOSH:	250 ppm TWA; 590 mg/m3 TWA
Alberta:	500 ppm TWA; 1200 mg/m3 TWA 750 ppm STEL; 1800 mg/m3 STEL
British Columbia:	250 ppm TWA 500 ppm STEL
Manitoba:	500 ppm TWA 750 ppm STEL
New Brunswick:	500 ppm TWA; 1188 mg/m3 TWA 750 ppm STEL; 1782 mg/m3 STEL
NW Territories:	1000 ppm TWA; 2370 mg/m3 TWA 1250 ppm STEL; 2970 mg/m3 STEL
Nova Scotia:	500 ppm TWA 750 ppm STEL
Nunavut:	1000 ppm TWA; 2370 mg/m3 TWA 1250 ppm STEL; 2970 mg/m3 STEL
Ontario:	500 ppm TWAEV 750 ppm STEV
Quebec:	500 ppm TWAEV; 1190 mg/m3 TWAEV 1000 ppm STEV; 2380 mg/m3 STEV
Saskatchewan:	750 ppm STEL 500 ppm TWA
Yukon:	1250 ppm STEL; 3000 mg/m3 STEL 1000 ppm TWA; 2400 mg/m3 TWA

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Methyl ethyl ketone (78-93-3)

ACGIH:	300 ppm STEL 200 ppm TWA
OSHA:	200 ppm TWA; 590 mg/m3 TWA
NIOSH:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Alberta:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
British Columbia:	50 ppm TWA 100 ppm STEL
Manitoba:	200 ppm TWA 300 ppm STEL
New Brunswick:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
NW Territories:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Nova Scotia:	200 ppm TWA 300 ppm STEL
Nunavut:	200 ppm TWA; 590 mg/m3 TWA 300 ppm STEL; 885 mg/m3 STEL
Ontario:	200 ppm TWAEV; 590 mg/m3 TWAEV 300 ppm STEV; 885 mg/m3 STEV
Quebec:	50 ppm TWAEV; 150 mg/m3 TWAEV 100 ppm STEV; 300 mg/m3 STEV
Saskatchewan:	300 ppm STEL 200 ppm TWA
Yukon:	250 ppm STEL; 740 mg/m3 STEL 200 ppm TWA; 590 mg/m3 TWA

Magnesium oxide (1309-48-4)

ACGIH:	10 mg/m3 TWA inhalable fraction
OSHA:	15 mg/m3 TWA fume, total particulate
Alberta:	10 mg/m3 TWA (fume)
British Columbia:	10 mg/m3 TWA Mg fume, inhalable; 3 mg/m3 TWA Mg respirable dust and fume 10 mg/m3 STEL Mg respirable dust and fume
Manitoba:	10 mg/m3 TWA inhalable fraction
New Brunswick:	10 mg/m3 TWA fume
NW Territories:	10 mg/m3 TWA Mg fume 20 mg/m3 STEL Mg fume
Nova Scotia:	10 mg/m3 TWA inhalable fraction
Nunavut:	10 mg/m3 TWA Mg fume 20 mg/m3 STEL Mg fume
Ontario:	10 mg/m3 TWAEV inhalable
Quebec:	10 mg/m3 TWAEV Mg fume
Saskatchewan:	20 mg/m3 STEL (inhalable fraction) 10 mg/m3 TWA (inhalable fraction)
Yukon:	10 mg/m3 STEL (Mg, fume) 10 mg/m3 TWA (Mg, fume)

Engineering Controls

Use general ventilation.

PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields.

Personal Protective Equipment: Skin

The use of nitrile-latex gloves is recommended.

Personal Protective Equipment: Respiratory

If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.

Personal Protective Equipment: General

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

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

Appearance:	Amber liquid	Odor:	Slight odor
Physical State:	Liquid	pH:	132° F - 232° F
Vapor Pressure:	N/A	Vapor Density:	Heavier than air
Boiling Point:	N/A	Melting Point:	N/A
Solubility (H2O):	N/A	Specific Gravity:	N/A
Evaporation Rate:	Slower than ether	VOC:	631 g/L
Octanol/H2O Coeff.:	N/A	Flash Point:	<20° F
Flash Point Method:	CC	Upper Flammability Limit (UFL):	1%
Lower Flammability Limit (LFL):	N/A	Burning Rate:	N/A
Auto Ignition:	N/A		

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

Chemical Stability

This is a stable material.

Chemical Stability: Conditions to Avoid

Keep away from heat, sparks, or open flame. Eliminate sources of ignition.

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

Hexane (110-54-3)

Inhalation LC50 Rat 48000 ppm 4 h; Oral LD50 Rat 25 g/kg; Dermal LD50 Rabbit 3000 mg/kg

Naphtha, petroleum, hydrotreated light (64742-49-0)

Inhalation LC50 Rat 73680 ppm 4 h; Oral LD50 Rat >5000 mg/kg; Dermal LD50 Rabbit >3160 mg/kg

Toluene (108-88-3)

Inhalation LC50 Rat 12.5 mg/L 4 h; Inhalation LC50 Rat >26700 ppm 1 h; Oral LD50 Rat 636 mg/kg; Dermal LD50 Rabbit 8390 mg/kg; Dermal LD50 Rat 12124 mg/kg

Acetone (67-64-1)

Oral LD50 Rat 5800 mg/kg

Methyl ethyl ketone (78-93-3)

Inhalation LC50 Mouse 32 g/m3 4 h; Oral LD50 Rat 2737 mg/kg; Dermal LD50 Rabbit 6480 mg/kg

Carcinogenicity

A: General Product Information

No information available for the product.

B: Component Carcinogenicity

Toluene (108-88-3)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
IARC:	Monograph 71 [1999]; Monograph 47 [1989] (Group 3 (not classifiable))

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Acetone (67-64-1)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
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Magnesium oxide (1309-48-4)

ACGIH:	A4 - Not Classifiable as a Human Carcinogen
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Sensitization

No information available for the product.

*** Section 12 - Ecological Information ***

Ecotoxicity

A: General Product Information

No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Hexane (110-54-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	2.1-2.98 mg/L	[flow-through]
24 Hr EC50 Daphnia magna	>1000 mg/L	

Naphtha, petroleum, hydrotreated light (64742-49-0)

Test & Species		Conditions
96 Hr LC50 Chaetogammarus marinus	2.6 mg/L	

Toluene (108-88-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	15.22-19.05 mg/L	[flow-through] 1 day old
96 Hr LC50 Pimephales promelas	12.6 mg/L	[static]
96 Hr LC50 Oncorhynchus mykiss	5.89-7.81 mg/L	[flow-through]
96 Hr LC50 Oncorhynchus mykiss	14.1-17.16 mg/L	[static]
96 Hr LC50 Oncorhynchus mykiss	5.8 mg/L	[semi-static]
96 Hr LC50 Lepomis macrochirus	11.0-15.0 mg/L	[static]
96 Hr LC50 Oryzias latipes	54 mg/L	[static]
96 Hr LC50 Poecilia reticulata	28.2 mg/L	[semi-static]
96 Hr LC50 Poecilia reticulata	50.87-70.34 mg/L	[static]
96 Hr EC50 Pseudokirchneriella subcapitata	>433 mg/L	
72 Hr EC50 Pseudokirchneriella subcapitata	12.5 mg/L	[static]
48 Hr EC50 Daphnia magna	5.46 - 9.83 mg/L	[Static]
48 Hr EC50 Daphnia magna	11.5 mg/L	

Acetone (67-64-1)

Test & Species		Conditions
96 Hr LC50 Oncorhynchus mykiss	4.74-6.33 ml/L	
96 Hr LC50 Pimephales promelas	6210-8120 mg/L	[static]
96 Hr LC50 Lepomis macrochirus	8300 mg/L	
48 Hr EC50 Daphnia magna	10294 - 17704 mg/L	[Static]
48 Hr EC50 Daphnia magna	12600 - 12700 mg/L	

Methyl ethyl ketone (78-93-3)

Test & Species		Conditions
96 Hr LC50 Pimephales promelas	3130-3320 mg/L	[flow-through]
48 Hr EC50 Daphnia magna	>520 mg/L	
48 Hr EC50 Daphnia magna	5091 mg/L	
48 Hr EC50 Daphnia magna	4025 - 6440 mg/L	[Static]

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*** Section 13 - Disposal Considerations ***

US EPA Waste Number & Descriptions

A: General Product Information

No information available for the product.

B: Component Waste Numbers

Toluene (108-88-3)

RCRA:	waste number U220
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Acetone (67-64-1)

RCRA:	waste number U002 (Ignitable waste)
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Methyl ethyl ketone (78-93-3)

RCRA:	waste number U159 (Ignitable waste, Toxic waste) 200.0 mg/L regulatory level
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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 ***

US DOT Information

Shipping Name: Adhesives

UN/NA #: UN1133 Hazard Class: 3 Packing Group: II

IATA Information

Shipping Name: Adhesives

UN #: UN1133 Hazard Class: 3 Packing Group: II

IMDG Information

Shipping Name: Adhesives

UN #: UN1133 Hazard Class: 3 Packing Group: II

*** Section 15 - Regulatory Information ***

US Federal Regulations

A: General Product Information

All components are on the U.S. EPA TSCA Inventory List. 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).

Hexane (110-54-3)

SARA 313:	1.0 % de minimis concentration
CERCLA:	5000 lb final RQ; 2270 kg final RQ

Toluene (108-88-3)

SARA 313:	1.0 % de minimis concentration
CERCLA:	1000 lb final RQ; 454 kg final RQ

Acetone (67-64-1)

CERCLA:	5000 lb final RQ; 2270 kg final RQ
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Methyl ethyl ketone (78-93-3)

CERCLA:	5000 lb final RQ; 2270 kg final RQ
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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
Hexane	110-54-3	No	Yes	Yes	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	Yes
Methyl ethyl ketone	78-93-3	Yes	Yes	Yes	Yes	Yes	Yes
Magnesium oxide	1309-48-4	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 a chemical known to the state of California to cause reproductive/developmental effects.

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
Hexane	110-54-3	Yes	DSL	EINECS
Naphtha, petroleum, hydrotreated light	64742-49-0	Yes	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS
Methyl ethyl ketone	78-93-3	Yes	DSL	EINECS
Magnesium oxide	1309-48-4	Yes	DSL	EINECS

*** Section 16 - Other Information ***

Reference

G1-2851-01

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. BLV=Biological Limit Values TLV = Threshold Limit Value. NFPA = National Fire Protection Association. HMIS = Hazardous Material Information System. CFR = Code of Federal Regulations. 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 SAH00268