

SAFETY DATA SHEET

1. Identification

Material name: Immerbond®

Material:

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Sealants
3735 Green Road
Cleveland OH 44122
US

Contact person:

EHS Department

Telephone:

216-292-5000

Emergency telephone number:

1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids Category 3

Health Hazards

Carcinogenicity Category 2

Toxic to reproduction Category 2

Unknown toxicity - Health

Acute toxicity, oral 74.92 %

Acute toxicity, dermal 76.19 %

Acute toxicity, inhalation, vapor 99.99 %

Acute toxicity, inhalation, dust or mist 98.65 %

Unknown toxicity - Environment

Acute hazards to the aquatic environment 72.04 %

Chronic hazards to the aquatic environment 100 %

Label Elements

Hazard Symbol:



Signal Word:

Warning

Hazard Statement:	Flammable liquid and vapor. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.
Precautionary Statement:	
Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.
Response:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If exposed or concerned: Get medical advice/attention. In case of fire: Use \bar{o} to extinguish.
Storage:	Store in well-ventilated place. Keep cool. Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification:	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Calcium carbonate	471-34-1	15 - 40%
Titanium dioxide	13463-67-7	0.5 - 1.5%
Carbon Black	1333-86-4	0.1 - 1%
Stearic acid	57-11-4	0.1 - 1%
Octamethylcyclotetrasiloxane	556-67-2	0.1 - 1%
Petroleum distillates	64742-47-8	0.1 - 1%
Iron oxide	1309-37-1	0.1 - 1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion:	Call a POISON CENTER/doctor/.../if you feel unwell. Rinse mouth.
Inhalation:	Move to fresh air.
Skin Contact:	Wash skin thoroughly with soap and water. Get medical attention if symptoms occur. Take off immediately all contaminated clothing.

Eye contact: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. If eye irritation persists: Get medical advice/attention.

Most important symptoms/effects, acute and delayed

Symptoms: Respiratory tract irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Vapors may travel considerable distance to a source of ignition and flash back. Vapors may cause a flash fire or ignite explosively. Prevent buildup of vapors or gases to explosive concentrations.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Ventilate closed spaces before entering them. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep upwind.

Methods and material for containment and cleaning up: Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.

Notification Procedures: In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Environmental Precautions: Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Take precautionary measures against static discharges. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up. Store in a well-ventilated place. Store in a cool place.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Calcium carbonate - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Calcium carbonate - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Carbon Black - Inhalable fraction.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (2011)
Carbon Black	PEL	3.5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Stearic acid	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Petroleum distillates - Non-aerosol. - as total hydrocarbon vapor	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2011)
	TWA	200 mg/m3	US. ACGIH Threshold Limit Values (2011)
Iron oxide - Respirable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (2011)
Iron oxide - Fume.	PEL	10 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	type	Exposure Limit Values	Source
Calcium carbonate - Total dust.	STEL	20 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Calcium carbonate - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide	TWAEV	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Carbon Black - Inhalable	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Carbon Black - Inhalable fraction.	TWAEV	3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Carbon Black	TWA	3.5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information:	Use explosion-proof ventilation equipment. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	Use suitable protective gloves if risk of skin contact.
Other:	Wear suitable protective clothing.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. When using do not smoke. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance

Physical state:	liquid
Form:	liquid
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	52 °C 126 °F
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.2
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.

Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity

Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: No data available.
Conditions to avoid: Heat, sparks, flames.
Incompatible Materials: No data available.
Hazardous Decomposition Products: Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.
Inhalation: In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact: May be harmful in contact with skin.
Eye contact: Eye contact is possible and should be avoided.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral Product: ATEmix: 15,379.7 mg/kg
Dermal Product: ATEmix: 2,189.33 mg/kg
Inhalation Product: No data available.

Repeated dose toxicity Product: No data available.

Skin Corrosion/Irritation Product: No data available.

Specified substance(s):

Calcium carbonate	in vivo (Rabbit): Experimental result, Key study
Titanium dioxide	in vivo (Rabbit): Experimental result, Supporting study
Carbon Black	in vivo (Rabbit): Experimental result, Key study
Stearic acid	in vivo (Rabbit): Experimental result, Key study
Octamethylcyclotetrasiloxane	in vivo (Rabbit): Experimental result, Key study
Petroleum distillates	in vivo (Rabbit): Experimental result, Key study
Iron oxide	in vivo (Rabbit): Experimental result, Weight of Evidence study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Calcium carbonate	in vivo (Rabbit, 24 - 72 hrs): Not irritating
Titanium dioxide	in vivo (Rabbit, 24 hrs): Not irritating
Carbon Black	in vivo (Rabbit, 24 - 72 hrs): Not irritating
Stearic acid	in vivo (Rabbit, 27 - 72 hrs): Not irritating
Petroleum distillates	in vivo (Rabbit, 24 - 72 hrs): Not irritating
Iron oxide	in vivo (Rabbit, 1 - 72 hrs): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide	Overall evaluation: Possibly carcinogenic to humans.
Carbon Black	Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity

Product: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Calcium carbonate LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): > 56,000 mg/l Mortality

Octamethylcyclotetrasiloxane LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 14 d): 0.0085 - 0.013 mg/l Mortality

Petroleum distillates LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 96 h): 2.9 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Titanium dioxide	ED 0 (Phoxinus phoxinus, 30 d): >= 1,000 mg/l Experimental result, Supporting study LC 10 (Oncorhynchus mykiss, 28 d): 0.981 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 50 (Oncorhynchus mykiss, 28 d): 7.31 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 1 (Oncorhynchus mykiss, 28 d): 0.191 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l Experimental result, Supporting study
Carbon Black	NOAEL (Salmo sp., 30 d): 17 mg/l QSAR QSAR, Key study
Octamethylcyclotetrasiloxane	NOAEL (Oncorhynchus mykiss, 93 d): >= 4.4 µg/l Experimental result, Key study LC 50 (Oncorhynchus mykiss, 96 h): > 23 µg/l Experimental result, Supporting study NOAEL (Oncorhynchus mykiss, 18 d): < 23 µg/l Experimental result, Supporting study LC 80 (Oncorhynchus mykiss, 18 d): 23 µg/l Experimental result, Supporting study NOAEL (Oncorhynchus mykiss, 18 d): >= 31 µg/l Experimental result, Supporting study
Petroleum distillates	NOAEL (Oncorhynchus mykiss, 28 d): 0.098 mg/l QSAR QSAR, Key study
Iron oxide	LOAEL (Salvelinus fontinalis, 35 Weeks): 12 mg/l Experimental result, Supporting study NOAEL (Salvelinus fontinalis, 35 Weeks): 6 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 33 d): 1 mg/l Experimental result, Supporting study LOAEL (Pimephales promelas, 12 Months): 1.5 mg/l Experimental result, Supporting study NOAEL (Pimephales promelas, 33 d): 1.6 mg/l Experimental result, Supporting study
Aquatic Invertebrates Product:	No data available.
Toxicity to Aquatic Plants Product:	No data available.
Persistence and Degradability	
Biodegradation Product:	No data available.
BOD/COD Ratio Product:	No data available.
Bioaccumulative Potential Bioconcentration Factor (BCF)	

Product: No data available.

Specified substance(s):

Octamethylcyclotetrasiloxane Fathead minnow (Pimephales promelas), Bioconcentration Factor (BCF):
3,800 - 4,200 (Flow through)

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Stearic acid Log Kow: 8.23

Mobility in Soil: No data available.

Other Adverse Effects: No data available.

13. Disposal considerations

Disposal instructions: No data available.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methanol	5000 lbs.
2-Butylamine	1000 lbs.
Triethyl amine	5000 lbs.
Cyclohexylamine	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Fire Hazard
Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

<u>Chemical Identity</u>	<u>Reportable quantity</u>	<u>Threshold Planning Quantity</u>
Cyclohexylamine	10000 lbs.	10000 lbs.

SARA 304 Emergency Release Notification

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Methanol	5000 lbs.
2-Butylamine	1000 lbs.
Triethyl amine	5000 lbs.
Cyclohexylamine	100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
Cyclohexylamine	500lbs
Calcium carbonate	500 lbs
Titanium dioxide	500 lbs
Carbon Black	500 lbs
Stearic acid	500 lbs
Octamethylcyclotetrasiloxane	500 lbs
Petroleum distillates	500 lbs
Iron oxide	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Cyclohexylamine	15000 lbs

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Calcium carbonate
Carbon Black

US. Massachusetts RTK - Substance List

Chemical Identity

Calcium carbonate
Cyclohexylamine

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Calcium carbonate

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

Regulatory VOC (less water and exempt solvent):	31 g/l
VOC Method 310:	2.60 %

Inventory Status:

Australia AICS:	All components in this product are listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	All components in this product are listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	All components in this product are listed on or exempt from the Inventory.
US TSCA Inventory:	All components in this product are listed on or exempt from the Inventory.

New Zealand Inventory of Chemicals:	All components in this product are listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.

16. Other information, including date of preparation or last revision
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Revision Date:	4/12/18
Version #:	02
Further Information:	No data available.
Disclaimer:	For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.