

Revision Date: 07/31/2015

SAFETY DATA SHEET

1. Identification

Material name: TREMFLEX 834 WHITE

Material: 9418064323

Recommended use and restriction on use

Recommended use: Sealant Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

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

Contact person:EH&S DepartmentTelephone:216-292-5000

Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer Category 1
Carcinogenicity Category 1A

Unknown toxicity - Health

Acute toxicity, oral 70.13 %
Acute toxicity, dermal 71.2 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust or mist 91.09 %

Environmental Hazards

Acute hazards to the aquatic Category 3

environment

Unknown toxicity - Environment

Acute hazards to the aquatic 98.05 %

environment

Chronic hazards to the aquatic 100 %

environment

Label Elements

Hazard Symbol:



Signal Word: Danger



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Hazard Statement: May cause an allergic skin reaction.

May cause cancer. Harmful to aquatic life.

Precautionary Statement: Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace. 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: Wash with plenty of water. If skin irritation or rash occurs: Get

medical advice/attention. If exposed or concerned: Get medical

advice/attention. Specific treatment (see this label). Wash contaminated

clothing before reuse.

Storage: 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:

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Calcium Carbonate (Limestone)	1317-65-3	40 - 70%
White mineral oil	8042-47-5	3 - 7%
Titanium dioxide	13463-67-7	0.5 - 1.5%
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	0.1 - 1%
Amorphous silica	7631-86-9	0.1 - 1%
Chlorothalonil	1897-45-6	0.1 - 1%
Ammonium hydroxide	1336-21-6	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: If skin irritation occurs: Get medical advice/attention. Destroy or thoroughly

clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an

allergic skin reaction develops, get medical attention.



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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: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

nd : See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate

protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning

up:

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: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so.



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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. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust.

Conditions for safe storage, including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

upational Exposure Limits				
Chemical Identity	type	Exposure Limit Values	Source	
Calcium Carbonate (Limestone) - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	
Calcium Carbonate (Limestone) - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	
White mineral oil - Inhalable fraction.	TWA	5 mg/m3	US. ACGIH Threshold Limit Values (2011)	
White mineral oil - Mist.	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)	
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (2011)	
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	
Crystalline Silica (Quartz)/ Silica Sand - Total dust.	TWA	0.3 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	
Amorphous silica	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	
	TWA	0.8 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	
Ammonium hydroxide	STEL	35 ppm	US. ACGIH Threshold Limit Values	





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				(2011)
Т	TWA	25 ppm		US. ACGIH Threshold Limit Values
				(2011)
P	PEL	50 ppm	35 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 (Limestone) - 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)
	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 (Limestone) - 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 (Limestone) - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
White mineral oil - Mist.	TWA	1 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
White mineral oil - Mist.	TWAEV	5 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
White mineral oil - Mist.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)



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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)
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWAEV	0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required.

Observe good industrial hygiene practices. Observe occupational exposure

limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: Wear chemical-resistant gloves, footwear, and protective clothing

appropriate for the risk of exposure. Contact health and safety professional

or manufacturer for specific information.

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. Contaminated work clothing should

not be allowed out of the workplace. Avoid contact with skin.

9. Physical and chemical properties



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Appearance

Physical state: solid
Form: Paste
Color: White
Odor: Mild

Odor threshold:

pH:

No data available.

No data available.

Melting point/freezing point:

No data available.

Initial boiling point and boiling range:

Flash Point:

No data available.

No data available.

Slower than Ether

Flammability (solid, gas): No Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

Explosive limit - upper (%):

Explosive limit - lower (%):

No data available.

No data available.

Vapor pressure:

No data available.

Vapor density: Vapors are heavier than air and may travel along the floor and

in the bottom of containers.

Relative density: 1.58

Solubility(ies)

Solubility in water:
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: Avoid heat or contamination.

Incompatible Materials: Strong acids. Avoid contact with oxidizing agents (e.g. nitric acid, peroxides

and chromates). Strong bases.

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.



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In high concentrations, vapors, fumes or mists may irritate nose, throat and

mucus membranes.

Skin Contact: Causes mild skin irritation. May cause an allergic skin reaction.

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: 27,271.48 mg/kg

Dermal

Product: ATEmix: 6,632.52 mg/kg

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

White mineral oil in vivo (Rabbit, 24 - 72 hrs): Not irritating

Titanium dioxide in vivo (Rabbit, 24 - 72 hrs): Not irritating

Amorphous silica in vivo (Rabbit, 24 hrs): Not irritating

Ammonium hydroxide Severely Irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.



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IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

Crystalline Silica (Quartz)/ Silica

Sand

Overall evaluation: Carcinogenic to humans.

Chlorothalonil Overall evaluation: Possibly carcinogenic to humans.

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

Crystalline Silica Known To Be Human Carcinogen.

(Quartz)/ Silica

Sand

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: No data available.

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.



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Specified substance(s):

Titanium dioxide LC 50 (Mummichog (Fundulus heteroclitus), 96 h): > 1,000 mg/l Mortality

Chlorothalonil LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 0.018

mg/I Mortality

Ammonium hydroxide LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 15 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Titanium dioxide EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication

Chlorothalonil LC 50 (Water flea (Daphnia magna), 48 h): 0.151 - 0.253 mg/l Mortality

LC 50 (Water flea (Moina macrocopa), 3 h): > 10 mg/l Mortality LC 50 (Amphipod (Neoniphargus), 7 d): > 0.04 mg/l Mortality LC 50 (Amphipod (Neoniphargus), 4 d): > 0.04 mg/l Mortality

LC 50 (Isopod (Colubotelson chiltoni minor), 4 d): > 0.04 mg/l Mortality

Ammonium hydroxide LC 50 (Water flea (Daphnia magna), 25 h): 60 mg/l Mortality

LC 50 (Water flea (Ceriodaphnia dubia), 48 h): > 0 - 10 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

White mineral oil NOAEL (Oncorhynchus mykiss, 28 d): >= 1,000 mg/l QSAR

Titanium dioxide LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l experimental

result

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):



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Chlorothalonil Algae, algal mat (Algae), Bioconcentration Factor (BCF): 271 (Static)

Partition Coefficient n-octanol / water (log Kow)
Product:
No data available.

Mobility in Soil: No data available.

Other Adverse Effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in

accordance with applicable laws and regulations, and product

characteristics at time of disposal.

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)

<u>Chemical Identity</u> Formaldehyde <u>OSHA hazard(s)</u> Acute toxicity

Skin irritation
Skin sensitization
Flammability

respiratory tract irritation Respiratory sensitization

Cancer Eye irritation



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CERCLA Hazardous Substance List (40 CFR 302.4):

<u>Chemical Identity</u> <u>Reportable quan</u>	<u>tity</u>
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Ammonium hydroxide 1000 lbs. Formaldehyde 100 lbs. Ethyl alcohol 100 lbs. Ammonia 100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

Reportable

Chemical Identity	<u>quantity</u>	Threshold Planning Quantity
Formaldehyde	100 lbs.	500 lbs.
Ammonia	100 lbs.	500 lbs.

SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Ammonium hydroxide 1000 lbs. Formaldehyde 100 lbs. Ethyl alcohol 100 lbs. Ammonia 100 lbs.

SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u>	<u>Threshold Planning Quantity</u>
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Formaldehyde 500lbs Ammonia 500lbs Calcium Carbonate 500 lbs (Limestone)

White mineral oil

500 lbs Titanium dioxide 500 lbs Crystalline Silica (Quartz)/ 500 lbs

Silica Sand

500 lbs Amorphous silica Chlorothalonil 500 lbs Ammonium hydroxide 500 lbs

SARA 313 (TRI Reporting)

Chemical Identity

Chlorothalonil

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):

Reportable quantity Chemical Identity

Formaldehyde 15000 lbs Ammonia 10000 lbs 20000 lbs Ammonia

US State Regulations



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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 (Limestone)

White mineral oil

US. Massachusetts RTK - Substance List

Chemical Identity

Calcium Carbonate (Limestone)
White mineral oil
Crystalline Silica (Quartz)/ Silica Sand
Chlorothalonil
Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Ammonia

Calcium Carbonate (Limestone)
White mineral oil

US. Rhode Island RTK

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

Other Regulations:

Regulatory VOC (less water

and exempt solvent):

14 g/l

VOC Method 310: 0.67 %

Inventory Status:

Australia AICS: One or more components in this product are

not 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:

One or more components in this product are

not 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.



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Philippines PICCS: One or more components in this product are

not listed on or exempt from the inventory.

US TSCA Inventory:

One or more components in this product are

not listed on or exempt from the Inventory.

New Zealand Inventory of Chemicals:

One or more components in this product are

not 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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Version #: 1.0

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.