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# SAFETY DATA SHEET

### 1. Identification

Material name: Vulkem® 351

Material: 875806 805

Recommended use and restriction on use

Recommended use: Coatings 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)

Category 4

## 2. Hazard(s) identification

#### **Hazard Classification**

#### **Physical Hazards**

Flammable liquids Category 3

**Health Hazards** 

Acute toxicity (Inhalation - dust and

nist)

Serious Eye Damage/Eye Irritation Category 2B
Respiratory sensitizer Category 1
Skin sensitizer Category 1
Carcinogenicity Category 2

## **Unknown toxicity - Health**

Acute toxicity, oral 8.84 %
Acute toxicity, dermal 32.69 %
Acute toxicity, inhalation, vapor 100 %
Acute toxicity, inhalation, dust 98.93 %

or mist

#### **Environmental Hazards**

Acute hazards to the aquatic Category 3

environment

#### **Unknown toxicity - Environment**

Acute hazards to the aquatic 61.45 %

environment



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Chronic hazards to the aquatic 100 % environment

#### **Label Elements**

### **Hazard Symbol:**



Signal Word: Danger

**Hazard Statement:** Flammable liquid and vapor.

Harmful if inhaled. Causes eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction. Suspected of causing cancer.

Harmful to aquatic life.

Precautionary Statements

**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 non-sparking tools. Take action to prevent static discharges. Wear protective gloves/protective

clothing/eye protection/face protection. Avoid breathing

dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. [In case of inadequate ventilation] wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use

personal protective equipment as required. Avoid release to the

environment.

**Response:** IF INHALED: Remove person to fresh air and keep comfortable for

breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor/... IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water [or shower]. If skin irritation or rash occurs: Get medical

advice/attention. Call a POISON CENTRE/doctor/ if you feel unwell. Specific treatment (see this label). Wash contaminated clothing before reuse. In case

of fire: Use ... for extinction.

**Storage:** Store in a 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.



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Hazard(s) not otherwise classified (HNOC):

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 (%)*
Titanium dioxide	13463-67-7	10 - <20%
Xylene	1330-20-7	10 - <20%
Talc	14807-96-6	5 - <10%
Ethylbenzene	100-41-4	1 - <5%
Aluminum oxide	1344-28-1	1 - <5%
Amorphous silica	7631-86-9	0.1 - <1%
Dibutyl tin dilaurate	77-58-7	0.1 - <1%
Isophorone Diisocyanate	4098-71-9	0.1 - <1%
Zirconium dioxide	1314-23-4	0.1 - <1%
Dolomite	16389-88-1	0.1 - <1%
Magnesite	546-93-0	0.1 - <1%

<sup>\*</sup> 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 CENTRE/doctor/ if you feel unwell. Rinse mouth.

**Inhalation:** Call a physician or poison control center immediately. If breathing stops,

provide artificial respiration. Move to fresh air. If breathing is difficult, give

oxygen.

**Skin Contact:** Take off immediately all contaminated clothing. 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.

**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



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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. Evacuate area. See Section 8 of the SDS for Personal Protective Equipment. Keep unauthorized personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective

clothing.

Methods and material for containment and cleaning

un:

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

to do so. Do not contaminate water sources or sewer.



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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. Wash hands thoroughly after handling. 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. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. 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	Туре	Exposure Lim	nit Values	Source
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)
Titanium dioxide - Respirable fraction.	TWA		15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA		15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Respirable fraction.	TWA		5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA		50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Xylene	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	150 ppm	655 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	100 ppm	435 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	STEL	150 ppm	655 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	100 ppm	435 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	150 ppm	655 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	ST ESL		350 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (07 2011)
	ST ESL		80 ppb	US. Texas. Effects Screening Levels (Texas



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AN ESL		1			
AN ESL					Commission on Environmental Quality) (07 2011)
STEL   150 ppm   655 mg/m3   US. California Code of Regulations, Title 8, 2010   US. California Code of Regulations, Tit		AN ESL		42 ppb	Commission on Environmental Quality) (07 2011)
Celling		AN ESL		180 μg/m3	Commission on Environmental Quality) (07
Section 5155. Airborne Contaminants (08 2010)   Section 5155. Airborne Contaminants (08 2011)   Section 5155. Airborne Conta		STEL	150 ppm	655 mg/m3	Section 5155. Airborne Contaminants (08
Section 5155. Airborne Contaminants (08 2010)   STEL   150 ppm		Ceiling	300 ppm		Section 5155. Airborne Contaminants (08 2010)
STEL   150 ppm		TWA PEL	100 ppm	435 mg/m3	Section 5155. Airborne Contaminants (08 2010)
PEL		TWA	100 ppm		US. ACGIH Threshold Limit Values (2011)
Contaminants (29 CFR 1910.1000) (02 2006)		STEL	150 ppm		US. ACGIH Threshold Limit Values (2011)
Talc		PEL	100 ppm	435 mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
Talc - Respirable.				2 mg/m3	US. ACGIH Threshold Limit Values (2011)
TWA				particles per cubic foot of air	(2000)
TWA	Talc - Respirable.	TWA		of particles per cubic foot	
PEL		TWA		0.1 mg/m3	(2000)
Contaminants (29 CFR 1910.1000) (02 2006)	Ethylbenzene			105 / 0	
Aluminum oxide - Respirable fraction.		PEL	100 ppm	435 mg/m3	Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Total dust.   PEL   15 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)		TWA		1 mg/m3	US. ACGIH Threshold Limit Values (2011)
Aluminum oxide - Total dust.		PEL		5 mg/m3	
fraction.         2016)           Aluminum oxide - Total dust.         TWA         15 mg/m3         US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)           TWA         50 millions of particles per cubic foot of air         US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)           Aluminum oxide - Respirable fraction.         TWA         15 millions of particles per cubic foot of air         US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)           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)           Dibutyl tin dilaurate - as Sn         STEL         0.2 mg/m3         US. ACGIH Threshold Limit Values (2011)           TWA         0.1 mg/m3         US. ACGIH Threshold Limit Values (2011)         US. ACGIH Threshold Limit Values (2011)           Isophorone Diisocyanate         TWA         0.005 ppm         US. ACGIH Threshold Limit Values (2011)           Zirconium dioxide - as Zr         STEL         10 mg/m3         US. ACGIH Threshold Limit Values (2011)           TWA         5 mg/m3         US. ACGIH Threshold Limit Values (2011)				15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
TWA		TWA		5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Dibutyl tin dilaurate - as Sn   STEL	Aluminum oxide - Total dust.	TWA		15 mg/m3	2016)
Aluminum oxide - Respirable fraction.  TWA  TWA  TWA  TWA  TWA  TWA  TWA  TW		TWA		particles per cubic foot of	
Dibutyl tin dilaurate - as Sn   STEL   D.2 mg/m3   US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)	•	TWA		15 millions of particles per cubic foot of	
(2000)   Dibutyl tin dilaurate - as Sn   STEL   0.2 mg/m3   US. ACGIH Threshold Limit Values (2011)     TWA   0.1 mg/m3   US. ACGIH Threshold Limit Values (2011)     PEL   0.1 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)     Isophorone Diisocyanate   TWA   0.005 ppm   US. ACGIH Threshold Limit Values (2011)     Zirconium dioxide - as Zr   STEL   10 mg/m3   US. ACGIH Threshold Limit Values (2011)     TWA   5 mg/m3   US. ACGIH Threshold Limit Values (2011)     PEL   5 mg/m3   US. OSHA Table Z-1 Limits for Air	Amorphous silica	TWA		particles per cubic foot of	
TWA         0.1 mg/m3         US. ACGIH Threshold Limit Values (2011)           PEL         0.1 mg/m3         US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)           Isophorone Diisocyanate         TWA         0.005 ppm         US. ACGIH Threshold Limit Values (2011)           Zirconium dioxide - as Zr         STEL         10 mg/m3         US. ACGIH Threshold Limit Values (2011)           TWA         5 mg/m3         US. ACGIH Threshold Limit Values (2011)           PEL         5 mg/m3         US. OSHA Table Z-1 Limits for Air					(2000)
PEL   0.1 mg/m3   US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)	Dibutyl tin dilaurate - as Sn				
Isophorone Diisocyanate TWA 0.005 ppm US. ACGIH Threshold Limit Values (2011)  Zirconium dioxide - as Zr STEL 10 mg/m3 US. ACGIH Threshold Limit Values (2011)  TWA 5 mg/m3 US. ACGIH Threshold Limit Values (2011)  PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air					US. OSHA Table Z-1 Limits for Air
Zirconium dioxide - as Zr STEL 10 mg/m3 US. ACGIH Threshold Limit Values (2011) TWA 5 mg/m3 US. ACGIH Threshold Limit Values (2011) PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air	Isophorone Diisocvanate	TWA	0.005 nnm		US_ACGIH Threshold Limit Values (2011)
TWA 5 mg/m3 US. ACGIH Threshold Limit Values (2011) PEL 5 mg/m3 US. OSHA Table Z-1 Limits for Air	Zirconium dioxide - as Zr		0.003 μμπ	10 ma/m3	
		PEL		5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)



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Dolomite - Inhalable particles.	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
Dolomite - Respirable particles.	TWA	3 mg/m3	US. ACGIH Threshold Limit Values (03 2016)
Dolomite - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Dolomite - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Magnesite - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Magnesite - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Chemical name	Туре	Exposure Lim	it Values	Source
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	TWA		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)
Xylene	TWA	100 ppm	434 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
	STEL	150 ppm	651 mg/m3	Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2) (07 2009)
Xylene	TWA	100 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	150 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Xylene	TWA	100 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	150 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Xylene	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	150 ppm	651 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)



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Talc - Respirable.	TWA		2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Talc	TWA		2 fibers/mL	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Talc - Respirable fraction.	TWA		2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Talc - Respirable dust.	TWA		3 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Ethylbenzene	TWA	20 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (09 2011)
Ethylbenzene	TWA	20 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Ethylbenzene	TWA	100 ppm	434 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
	STEL	125 ppm	543 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Aluminum oxide - 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) (05 2013)
Aluminum oxide - 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) (05 2013)
Aluminum oxide - Respirable.	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)
Aluminum oxide - Respirable fraction.	TWA		3 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum oxide - Inhalable fraction.	TWA		10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Aluminum oxide - Respirable fraction.	TWA		1 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Aluminum oxide - Total dust. - as Al	TWA		10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Isophorone Diisocyanate	TWA	0.005 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	CEILING	0.01 ppm		Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Isophorone Diisocyanate	TWA	0.005 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
	CEV	0.02 ppm		Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)
Isophorone Diisocyanate	TWA	0.005 ppm	0.045 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

**Biological Limit Values** 

toregreen = miner					
Chemical Identity	Exposure Limit Values	Source			
Xylene (Methylhippuric acids: Sampling time: End of shift.)	1.5 g/g (Creatinine in urine)	ACGIH BEI (03 2013)			
Ethylbenzene (Sum of	0.15 g/g (Creatinine in urine)	ACGIH BEI (02 2014)			



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mandelic acid and	
phenylglyoxylic acid:	
Sampling time: End of shift.)	

## 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 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:** If engineering controls do not maintain airborne concentrations below

recommended exposure limits (where applicable) or to an acceptable level

(in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter,

cartridge or canister. Contact health and safety professional or

manufacturer for specific information.

**Hygiene measures:** Observe good industrial hygiene practices. Wash hands before breaks and

immediately after handling the product. When using do not smoke. Contaminated work clothing should not be allowed out of the workplace.

Avoid contact with skin.

## 9. Physical and chemical properties

#### **Appearance**

Physical state: liquid
Form: liquid
Color: White

Odor:

Odor threshold:

PH:

No data available.

Flash Point: 27 °C 80 °F(Setaflash Closed Cup)

**Evaporation rate:** Slower than Ether

Flammability (solid, gas): No



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## Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): 7.0 %(V)
Flammability limit - lower (%): 1.0 %(V)

Explosive limit - upper (%):

Explosive limit - lower (%):

Vapor pressure:

No data available.

No data available.

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

in the bottom of containers.

Relative density: 1.17

Solubility(ies)

Solubility in water: Practically Insoluble
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:** Alcohols. Amines. Strong acids. Strong bases. Water, moisture.

**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

**Inhalation:** 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:** Causes eye irritation.

**Ingestion:** May be ingested by accident. Ingestion may cause irritation and malaise.

## Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation:** No data available.

**Skin Contact:** No data available.



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**Eye contact:** No data available.

**Ingestion:** No data available.

## Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

**Product:** ATEmix: 17,804.87 mg/kg

**Dermal** 

**Product:** Not classified for acute toxicity based on available data.

Specified substance(s):

Xylene LD 50 (Rabbit): 12,126 mg/kg

Ethylbenzene LD 50 (Rabbit): 17,800 mg/kg

Amorphous silica LD 50 (Rabbit): > 2,000 mg/kg

Isophorone Diisocyanate LD 50 (Rat): > 7,000 mg/kg

Inhalation

**Product:** ATEmix: 2.03 mg/l

Repeated dose toxicity

**Product:** No data available.

Skin Corrosion/Irritation

**Product:** No data available.

Specified substance(s):



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Titanium dioxide in vivo (Rabbit): Not irritant Experimental result, Supporting study

Xylene in vivo (Rabbit): Moderate irritant Experimental result, Weight of Evidence

study

Aluminum oxide in vivo (Rabbit): Not irritant Experimental result, Key study

Amorphous silica in vivo (Rabbit): Not irritant Experimental result, Key study

Dibutyl tin dilaurate In vitro (Human, in vitro reconstituted epidermis model): Not irritant

Experimental result, Supporting study

Magnesite In vitro (Human, in vitro reconstituted epidermis model): Not irritant

Experimental result, Key study

Serious Eye Damage/Eye Irritation

**Product:** No data available.

Specified substance(s):

Titanium dioxide Rabbit, 24 hrs: Not irritating

Xylene Rabbit, 24 hrs: Moderately irritating

Ethylbenzene Rabbit, 7 d: Slightly irritating

Aluminum oxide Rabbit, 24 hrs: Not irritating

Amorphous silica Rabbit, 24 hrs: Not irritating

Dibutyl tin dilaurate Rabbit, 24 hrs: Highly irritating

Zirconium dioxide Rabbit, 24 hrs: Not irritating

Magnesite Reconstituted Corneal Epithelium model, 10 min: Not irritating

Respiratory or Skin Sensitization

**Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause sensitization by inhalation.

Carcinogenicity

**Product:** Suspected of causing cancer.



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## IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Talc Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall

evaluation: Possibly carcinogenic to humans.

Ethylbenzene 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:** 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:



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**Fish** 

**Product:** No data available.

Specified substance(s):

Xylene LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.41 mg/l Mortality

Ethylbenzene LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 96 h): 4.2

mg/I Mortality

Dibutyl tin dilaurate LC 50 (Ide, silver or golden orfe (Leuciscus idus), 48 h): 2 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

Ethylbenzene EC 50 (Water flea (Daphnia magna), 48 h): 1.37 - 4.4 mg/l Intoxication

Dibutyl tin dilaurate EC 50 (Water flea (Daphnia magna), 24 h): 0.66 mg/l Intoxication

#### Chronic hazards to the aquatic environment:

**Fish** 

**Product:** No data available.

**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.

Partition Coefficient n-octanol / water (log Kow)

**Product:** No data available.

Specified substance(s):

Xylene Log Kow: 3.12 - 3.20



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Ethylbenzene Log Kow: 3.15

Dibutyl tin dilaurate Log Kow: 3.12

**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:

UN1263, PAINT, 3, PG III

#### CFR / DOT:

UN1263, Paint, 3, PG III

## IMDG:

UN1263, PAINT, 3, PG III

## **Further Information:**

The above shipping description may not be accurate for all container sizes and all modes of transportation. Please refer to Bill of Lading.

## 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):

Chemical Identity Reportable quantity

Xylene 100 lbs. Ethylbenzene 1000 lbs. Naphthalene 100 lbs.

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

#### **Hazard categories**

Fire Hazard

Immediate (Acute) Health Hazards



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Delayed (Chronic) Health Hazard

Flammable liquids

Acute toxicity

Serious Eye Damage/Eye Irritation

Respiratory sensitizer

Skin sensitizer

Carcinogenicity

Static-accumulating flammable liquid

#### **SARA 302 Extremely Hazardous Substance**

**Reportable** 

<u>Chemical Identity</u> <u>quantity</u> <u>Threshold Planning Quantity</u>

Isophorone Diisocyanate 500 lbs. 500 lbs.

#### SARA 304 Emergency Release Notification

<u>Chemical Identity</u> <u>Reportable quantity</u>

Xylene 100 lbs. Ethylbenzene 1000 lbs.

Isophorone Diisocyanate

Naphthalene 100 lbs.

#### SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u> Isophorone Diisocyanate 500lbs

Titanium dioxide 10000 lbs Xylene 10000 lbs Talc 10000 lbs Ethylbenzene 10000 lbs Aluminum oxide 10000 lbs Amorphous silica 10000 lbs Dibutyl tin dilaurate 10000 lbs Zirconium dioxide 10000 lbs Dolomite 10000 lbs Magnesite 10000 lbs

## SARA 313 (TRI Reporting)

#### **Chemical Identity**

Xylene

Ethylbenzene

Aluminum oxide

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

None present or none present in regulated quantities.

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

Chemical IdentityReportable quantityXyleneReportable quantity: 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.

Titanium dioxide Carcinogenic. 09 2011 Naphthalene Carcinogenic. 09 2011



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

## **Chemical Identity**

Titanium dioxide

**Xylene** 

Talc

Ethylbenzene

Aluminum oxide

#### **US. Massachusetts RTK - Substance List**

## **Chemical Identity**

Titanium dioxide

Xylene

Talc

Ethylbenzene

Aluminum oxide

Isophorone Diisocyanate

## US. Pennsylvania RTK - Hazardous Substances

## **Chemical Identity**

Titanium dioxide

**Xylene** 

Talc

Ethylbenzene

Aluminum oxide

#### **US. Rhode Island RTK**

## **Chemical Identity**

Titanium dioxide

**Xylene** 

Talc

Ethylbenzene

Aluminum oxide

## International regulations

## **Montreal protocol**

not applicable

### Stockholm convention

not applicable

#### **Rotterdam convention**

not applicable

## **Kyoto protocol**

not applicable

VOC:

Regulatory VOC (less water and : 232 g/l

exempt solvent)

VOC Method 310 : 19.83 %



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**Inventory Status:** 

Australia AICS: One or more components in this product are

not listed on or exempt from the Inventory.

Canada DSL Inventory List:

All components in this product are 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.

Philippines PICCS: One or more components in this product are

not 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:

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.

Mexico INSQ: One or more components in this product are

not listed on or exempt from the Inventory.

Ontario Inventory: One or more components in this product are

not listed on or exempt from the Inventory.

Taiwan Chemical Substance Inventory: One or more components in this product are

not listed on or exempt from the Inventory.



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## 16.Other information, including date of preparation or last revision

**Revision Date:** 06/26/2017

Version #: 2.0

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.