

Sid Harvey item #'s J14, J14-1 & J14-2

SDS # Z0025

Print Date: 5/31/2015

PRODUCT NAME: SIL-BOND RTV 4500
COLOR: CLEAR

REVISION DATE: May 31st 2015

1. PRODUCT AND COMPANY IDENTIFICATION

Commercial Product Name: SIL-BOND RTV 4500

Product Classification: Silicone Sealant

Manufacturer:

Silco Inc.

7635 St. Clair Avenue

Mentor, OH 44060

PHONE: 440-975-8886 FAX: 440-975-8887

General Description: Silicone elastomer

Physical Form: Paste

Color: Clear

Odor: Acetic acid odor

NFPA PROFILE: Health – 1 Flammability – 1 Instability/Reactivity - 0

Note: NFPA = National Fire Protection Association

2. HAZARDS IDENTIFICATION

Physical Hazards: Not classified

Health Hazards: Reproductive toxicity (fertility) Category 2

Environmental Hazards: Not classified

OSHA Defined Hazards: Not classified

- Hazards not stated here are “Not Classified”, “Not Applicable” or “Classification not possible”.

GHS Label Elements

Signal Word:

Warning



Hazard Statement:

Suspected of damaging fertility. May cause eye/lung/skin irritation.

Precautionary Statement:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves / protective clothing / eye protection / face protection. Wash well after handling. Contaminated work clothing should not be allowed out of work place.

Prevention:



SAFETY DATA SHEET

Response:	<p>SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention / advice. Get medical attention / advice if you feel unwell.</p> <p>EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritant persists get medical attention / advice.</p> <p>If exposed or concerned: get medical attention or advice. Take off contaminated clothing and wash it before reuse.</p>
Storage:	Store locked up.
Disposal:	Disposal of contents / container in accordance with local / regional / state / federal and international regulations.
Hazard(S) not Otherwise classified (HNOC):	None known.
Supplemental Information:	None known.
Substance(s) formed under the conditions of use:	<p>This product reacts with water, moisture or humid air to evolve following compounds: Acetic acid</p> <p>The following material is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards. Titanium oxide.</p>
HMIS (Ratings):	<p>Health: 1</p> <p>Flammability: 1</p> <p>Physical hazard: 0</p>

3. COMPOSITION/ INGREDIENTS

Mixtures

Hazardous Ingredients

Chemical Name	CAS Number	%
Ethyltriacetoxysilane	17689-77-9	1 – 5
Methylacetoxysilane	4253-34-3	1 – 5
Titanium oxide	13463-67-7	< 1
Distillates (petroleum), hydrotreated middle	64742-46-7	1 – 7
Octamethylcyclotetrasiloxane (impurity)	556-67-2	< 1

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. Call a physician if symptoms develop or persist.
Skin Contact:	Wash off with soap and plenty of water. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation or rash occurs: get medical attention / advice. Take off contaminated clothing and wash before use.
Eyes Contact:	Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation developed or persists.
Ingestion:	Wash out mouth. Get medical attention immediately.
Most Important symptoms / effects, acute and delayed:	Direct contact with eyes may cause temporary irritation.
Indication of immediate Medical attention and Special treatment Needed:	Treat Symptomatically.
General Information:	If exposed or concerned: Get medical advice / attention. Ensure that medical personnel are aware materials involved and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2)
Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	By heating and fire, harmful vapors / gases may be formed.
Specific protective equipment and precautions for firefighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots and self-contained breathing apparatus.
Fire Fighting equipment / Instructions:	Move containers from fire area if you can do so without risk.
General fire hazards:	No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk through spilled material. Ensure adequate ventilation. Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up:

Eliminate sources of ignition.
Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up product and place into a container for later disposal.
Small Spills: Wipe up with absorbent material (e.g. cloth). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for reuse.

Environmental precautions:

Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precaution for safe handling:

Provide adequate ventilation. Use care in handling/storage. Obtain special instructions before use. Wash hands thoroughly after handling. Do not handle until all safety precautions have been read and understood. Pregnant and breastfeeding women must not handle this product. Do not breathe mist or vapor. Avoid contact with eyes. Avoid contact with skin. Avoid long term exposure.

Conditions for safe storage, including any incompatibilities

Stored locked up. Keep container tightly closed. Keep out of reach of children. Store in a cool dry place out of direct sunlight. Keep in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	CAS #	Type	Value
Titanium oxide	13463-67-7	PEL	15 mg/m ³
Decomposition			
Distillates (petroleum) hydrotreated middle	64742-46-7	TWA (Mist)	5 mg/m ³
Acetic acid	64-19-7	PEL	25 mg/m ³ 10 ppm



SAFETY DATA SHEET

US. ACGIH Threshold Limit Values			
Components			
Titanium dioxide	13463-67-7	TWA	10 mg/m ³
Decomposition			
Acetic acid	64-19-7	STEL	15 ppm
		TWA	10 ppm
US. NIOSH: Pocket Guide to Chemical Hazards			
Decomposition			
Acetic acid	64-19-7	STEL	37 mg/m ³ 15 ppm
		TWA	25 mg/m ³ 10 ppm
Distillates (petroleum) hydrotreated middle	64742-46-7	TWA (Mist) ST (Mist)	5mg/m ³ 10mg/m ³
Biological limit values:	No biological exposure limits for the ingredient(s).		
Appropriate engineering controls:	Provide adequate general and local exhaust. Provide eyewash station. Pay attention to ventilation such as local exhaust, mechanical and or / door open for at least 24 hours after applications.		
Individual protection measures such as personal protective equipment.			
Eye / Face protection:	Tightly sealed safety glasses according to EN 166.		
Skin / Hand protection:	Wear protective gloves.		
Other:	Wear suitable protective clothing.		
Respiratory protection:	If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection.		
Thermal hazards:	Wear appropriate thermal protective clothing, when necessary.		
General Hygiene Considerations:	Avoid contact with eyes. Avoid contact with skin. When using, do not eat, drink or smoke. Keep away from food or drink. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the work place. Handle in accordance with good industrial hygiene and safety practice.		

9. PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance

Form:	Paste
Color:	Clear
Odor:	Acetic acid odor

Odor Threshold:	Not available
pH:	Not available
Melting point / freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash Point:	141.8 °F (> 96 °C) Closed cup
Evaporative rate:	< 1 (Butyl Acetate = 1)
Flammability (solid, gas):	Not applicable
Upper / Lower flammability or explosive limits:	
Flammability limit – lower (%):	No data
Flammability limit – upper (%):	No data
Explosive limit – Lower (%):	Not available
Explosive limit – Upper (%):	Not available
Vapor pressure:	Negligible (25 ⁰ C)
Vapor density:	> 1 (air=1)
Relative density:	1.04 (25 °C)
Solubility (water):	Not soluble
VOC Content:	30 grams per liter
Partition coefficient: (n-octanol / water)	Not applicable
Auto-ignition temperature:	No data
Decomposition temperature:	Not available
Viscosity:	Not applicable
Molecular weight:	Not applicable

10. STABILITY AND REACTIVITY

Reactivity	No hazardous reaction known under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous Reactions	Hazardous polymerization does not occur.
Conditions to avoid	None known.
Incompatible materials	Strong oxidizing agents. Water and moisture.
Hazardous decomposition products:	This product reacts with water, moisture, or humid air to evolve following compounds. Acetic acid. Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon dioxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion: Expected to be a low ingestion hazard.
Inhalation: Prolonged inhalation may be harmful.
Skin contact: No adverse effects due to skin contact are expected.
Eye contact: Direct contact with eyes may cause temporary irritation.

Symptoms related to the physical, chemical, and toxicological characteristics: Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity
Toxicological data
Decomposition

	CAS #	Species	Test Results
Acetic acid	64-19-7		
Acute Dermal LD50		Rabbit	1060 mg/kg
Inhalation LC 50		Guinea Pig	5000 ppm, 1 hours
		Mouse	5620 ppm, 1 hours
		Rat	11.4 mg/l, 4hours
Oral LD50		Mouse	4960 mg/kg
		Rabbit	1200 mg/kg
		Rat	3.31 g/kg
Distillates (petroleum) hydrotreated middle			
Oral Inhalation LC 50		Rat	> 5,000 mg/kg
Dermal		Rat	1.78 mg/l, 4 hours
		Rat	> 2,000 mg/kg

Skin corrosion / irritation: Causes severe skin burns and eye damage. (Acetic acid)
 Skin-Rabbit: 500 mg/24hr.MILD (Octamethylcyclotetrasiloxane)

Serious eye damage/eye irritation: Causes serious eye damage. (Acetic acid)
 Eye – Rabbit: MILD (Octamethylcycotetrasiloxane)

Respiratory Sensitization: Not available.



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Skin Sensitization:	No evidence of sensitization (Octamethylcyclotetrasiloxane)
Germ Cell Mutagenicity:	Negative (Bacteria) (Octamethylcyclotetrasiloxane)
Carcinogenicity:	The following material is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards. Titanium oxide. Titanium oxide (CAS 13463-67-7)
IARC Monographs, Overall Evaluation of Carcinogenicity.	2B Possibly carcinogenic to humans.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	Not listed
Reproductive Toxicity:	Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for 70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapor concentrations of 700 ppm had decreases in the number of implantation sites and live litter size. The significance of these findings to humans is not known. (Octamethylcyclotetrasiloxane)
Specific target organ toxicity – single exposure:	Not available
Specific target organ toxicity – repeated exposure:	Repeated inhalation or oral exposure of mice and rats to Octamethylcyclotetrasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive. A two year combined chronic and carcinogenicity assay was conducted on Octamethylcyclotetrasiloxane. Rats were exposed by whole-body vapor inhalation 6hrs /day, 5 days a week for up to 104 weeks to 0, 10, 30, 150 or 700 ppm of Octamethylcyclotetrasiloxane. The increase in incidence of (uterine) endometrial cell hyperplasia and uterine adenomas

Aspiration hazard:	(benign tumors) were observed in female rats at 700 ppm. Since these effects only occurred at 700 ppm, a level that greatly exceeds typical workplace or consumer exposure, it is unlikely that industrial, commercial or consumer uses of products containing Octamethylcyclotetrasiloxane would result in a significant risk to humans. (Octamethylcyclotetrasiloxane) The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard. Distillates (petroleum), hydrotreated middle
Chronic effects:	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
Further Information:	This product reacts with water, moisture or humid air to evolve following compounds: Acetic acid.

12. ECOLOGICAL CONSIDERATIONS

Ecotoxicity

- Octamethylcyclotetrasiloxane: May cause long lasting harmful effects to aquatic life.

Components

Titanium oxide
(CAS 13463-67-7)

Aquatic

Components		Species	Test Results
Crustacea	EC50	Water Flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus Heteroclitus)	> 1000 mg/l, 96 hours

Decomposition

Acetic acid
(CAS 64-19-7)

Aquatic

Crustacea	EC50	Water flea (Daphnia Magna)	65 mg/l, 48 hours
Fish	LC50	Bluegill (Leponis Macrochirus)	75mg/l, 96 hours

Persistence and degradability: Not available.

Bioaccumulative potential: Bio concentration Factor (BCF) / (Flathead minnow): 12400
Octamethylcyclotetrasiloxane.

Mobility in Soil: Not available.

Other adverse effects: Not available



13. DISPOSAL CONSIDERATIONS

Can be land-filled for cured product or burned in a chemical incinerator equipped with an afterburner and scrubber. Do not dispose the emptied container unlawfully. Observe all federal, state & local laws.

14. TRANSPORT INFORMATION

DOT: Not regulated as dangerous good.

IATA: Not regulated as dangerous good.

IMDG: Not regulated as dangerous good.

Transport in bulk according to Annex II of MARPOL 73/78 and The IBC Code: This product is not intended to be transported in bulk.

15. REGULATORY INFORMATION

US federal regulations: This product is a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): Not listed

**SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA)
SARA 313 (TRI reporting)**

US State Regulations

- **Massachusetts: Substance List:**
Titanium oxide (CAS 13463-67-7)
- **New Jersey Worker and Community Right to Know Act:**
Titanium oxide (CAS 13463-67-7)
- **Pennsylvania Worker and Community Right to Know Act:**
Titanium oxide (CAS 13463-67-7)
- **Rhode Island RTK:** Not regulated.
- **California Proposition 65:** The following material is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards.
- **US California Proposition 65 – CRT: Listed date / Carcinogenic substance**
Titanium oxide (CAS 13463-67-7) Listed: September 2, 2011

International Inventories

Country(s) or region	Inventory Name	On Inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non Domestic Substances (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemicals	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes
Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
United States	Toxic Substances Control Act (TSCA) Inventory	Yes

16. OTHER INFORMATION

Prepared by: Silco Inc.

These data are offered in good faith as typical values and not as product specifications. No warranty, either expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

www.silco-inc.com

MSDS Document

Product BOSS® 310 General Purpose Industrial Silicone Sealant

1. Chemical Product and Company Identification

Trade Name of this Product BOSS® 310 General Purpose Industrial Silicone Sealant

Synonyms: Industrial Sealants, 010131CL48, 01013WH48, 01013BK48, 01013AL48, 01013BZ48, 01013AM48, 02246CL36, 02246WH36, 02246BK36, 01849CL01, 31000, 31001, 31002, 31003, 31004, 31005, 31030, 31031, 31032, 31050, 31051, 31052, 31053, 31054, 31055, 01849AM01, 01849AL01, 01849BZ01, 01849WH01

MSDS ID BOSS310

Manufacturer

Accumetric, LLC
350 Ring Road
Elizabethtown, KY 42701

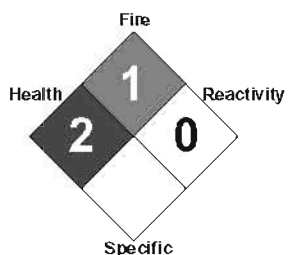
Phone Number

(270) 769-3385

Emergency Phone

CHEMTREC (800) 424-9300

Revision Date 9/6/2006



2. Composition and Information on Ingredients

Ingredient	CAS Number	Weight %	ACGIH TLV	PEL	STEL
Methyltriacetoxysilane	4253-34-3	1% - 5%	TWA 10ppm	TWA 10ppm	15ppm
Ethyltriacetoxysilane	17689-77-9	1% - 5%	TWA 10ppm	TWA 10ppm	15ppm

3. Hazard Identification

Eye Contact

Direct contact may cause moderate irritation.

Skin Contact

May cause moderate irritation.

Inhalation

Material is not likely to present an inhalation hazard at ambient conditions. However, if

material is heated or high vapor/aerosol concentrations are attained, central nervous system depression may occur, which is characterized by drowsiness, dizziness, confusion or loss of coordination.

Ingestion

Low ingestion hazard in normal use.

Symptoms of Overexposure

No known applicable information.

Existing Conditions Aggravated by Exposure

No known applicable information.

4. First Aid Information

Eye Contact

Immediately flush with water for 15 minutes. Seek medical attention.

Skin Contact

Remove from skin and wash thoroughly with soap and water or waterless cleanser. Get medical attention if irritation or other ill effects develop or persist.

Ingestion

No first aid should be needed.

Inhalation

Material is not likely to present an inhalation hazard at ambient conditions. If material is heated or vapor/mist/dust/fumes are generated, care should be taken to prevent inhalation. In case of exposure to vapor/mist/dust/fumes, move to fresh air.

Comments

Treat according to person's condition and specifics of exposure.

5. Fire Fighting Measures

Flash Point >212F >100C

FP Method Closed Cup

Auto-ignition Temperature

Not determined

Extinguishing Media

On large fires use dry chemical, foam, or water spray. On small fires use carbon dioxide, dry chemical or water spray. Water can be used to cool fire exposed containers.

Flammability Limits in Air

Not determined

Special Fire Fighting Procedures

Self-contained breathing apparatus and protective clothing should be worn when fighting

large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Unusual Fire or Explosion Hazards

None known

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products:

Carbon oxides and traces of incompletely burned carbon compounds

Formaldehyde

Silicon dioxide

Depending on color, hazardous decomposition products may also include:

Hydrogen

Nitrogen oxides

Metal oxides

Sulfur oxides

6. Accidental Release Measures

Steps to be taken in case of spill or release

Observe all personal protection equipment recommendations. Flood with water to polymerize. Soak up with inert absorbent. Dispose of saturated absorbent or cleaning materials appropriately. Local, state and federal regulations may apply to releases and disposal of this material, as well as those materials and items employed in cleanup of releases.

Note

See Section 8 for information about personal protective equipment for spills. Contact Accumetric, LLC if additional information is required.

7. Handling and Storage

Handling

Use adequate ventilation. Product evolves acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid within exposure guidelines or use respiratory protection. Avoid eye contact. Avoid skin contact. Keep container closed. Do not take internally. Avoid breathing vapor.

Storage

Use reasonable care and store away from oxidizing materials. Keep container closed and store away from water or moisture.

8. Exposure Controls and Personal Protection

Component Exposure Limits

Component Name: Ethyltriacetoxysilane

CAS Number: 17689-77-9
Exposure Limits: See acetic acid comments

Component Name: Methyltriacetoxysilane
CAS Number: 4253-34-3
Exposure Limits: See acetic acid comments

Acetic acid is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL. TWA 10 ppm and ACGIH TLV: TWA 10 ppm, STEL 15 ppm.

Component Exposure Limits - Almond only

Component Name: Dimethylsiloxane, trimethoxysilyl-terminated
CAS Number: PMN871176
Exposure Limits: See methyl alcohol comments.

Component Name: Aluminum
CAS Number: 7429-90-5
Exposure Limits: OSHA PEL (final rule): TWA 15mg/m³ total dust, 5 mg/m³ respirable dust.
ACGIH TLV: TWA 10mg/m³

Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL. TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm

Component Exposure Limits - Aluminum only

Component Name: Aluminum
CAS Number: 7429-90-5
Exposure Limits: OSHA PEL (final rule): TWA 15mg/m³ total dust, 5 mg/m³ respirable dust.
ACGIH TLV: TWA 10mg/m³

Engineering Controls

Local Ventilation: Recommended
General Ventilation: Recommended

Eye Protection

Use proper protection - safety glasses as a minimum.

Skin Protection

Wash at mealtimes and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves:
Nitrile Rubber. Butyl Rubber.

Inhalation

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator

Respiratory protection is not needed under ambient conditions. If vapor/mist/dust/fumes are generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtimes and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary Measures

Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

Comment

Product evolves acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid within exposure guidelines or use respiratory protection. When heated to temperatures above 150C in the presence of air, product can form formaldehyde vapors. Formaldehyde is a potential cancer hazard, a known skin and respiratory sensitizer, and an irritant to the eyes, nose throat, skin and digestive system. Safe handling conditions may be maintained by keeping vapor concentrations within the OSHA Permissible Exposure Limit for formaldehyde.

Note

These precautions are for room temperature handling. Use at elevated temperatures or aerosol/spray applications may require added precautions.

9. Physical and Chemical Properties

Physical State	Paste
Specific Gravity	1.032
Color/Appearance	Various
Odor	Acetic Acid Odor
Boiling/Cond. Point	Not Determined
Melting/Freezing Point	Not Determined
Solubility	Not Determined
Evaporation Rate	Not Determined
VOC %	29 g/l
Viscosity	Not Determined
Vapor Density	Not Determined
Vapor Pressure	Not Determined

Note

The above information is not intended for use in preparing product specifications. Contact Accumetric LLC before writing specifications.

10. Stability and Reactivity

Chemical Stability

Stable

Hazardous Polymerization

Will not occur

Conditions to Avoid

None known

Materials to Avoid / Incompatibility

Oxidizing material can cause a reaction. Water, moisture or humid air can cause hazardous vapors to form.

11. Toxicological Information

Special Hazard Information on Components

No known applicable information.

12. Ecological Information

Environmental Fate and Distribution

Complete information is not yet available.

Environmental Effects

Complete information is not yet available.

Fate and Effects in Waste Water Treatment Plants

Complete information is not yet available.

13. Disposal Considerations

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? NO

State or local laws may impose additional regulatory requirements regarding disposal.

We make no guarantee or warranty of any kind that the use or disposal of this product complies with all local, state, or federal laws. It is also the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

14. Transportation Information

DOT Road Shipment Information

Not subject to DOT.

Ocean Shipment (IMDG)

Not subject to IMDG code.

Air Shipment (IATA)

Not subject to IATA regulations.

15. Regulatory Information

The contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status

All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

SARA Title III Section 302 Extremely Hazardous Substances

None

SARA Title III Section 304 CERCLA Hazardous Substances

None

SARA Title III Section 312 Hazard Class

Acute: Yes

Chronic: Yes (Aluminum and Almond only, all other colors have no known Chronic effects)

Fire: No

Pressure: No

Reactive: No

SARA Title III Section 313 Toxic Chemicals

Depending on color, may contain:

Alumina hydrate (21645-51-2)

Aluminum (7429-90-5)

Antimony chromium manganese titanium brown rutile (6991-68-0)

California Proposition 65

This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm:

None known

Massachusetts

Silica, amorphous (7631-86-9)

Depending on color, may also contain:

Alumina hydrate (21645-51-2)
Aluminum (7429-90-5)
Barium sulfate (7727-43-7)
Carbon black (1333-86-4)
Iron oxide (1309-37-1)
Titanium dioxide (13463-67-7)

New Jersey

Dimethyl siloxane, hydroxy-terminated (70131-67-8)
Ethyltriacetoxysilane (17689-77-9)
Hydrotreated middle petroleum distillates (64742-46-7)
Methyltriacetoxysilane (4253-34-3)
Silica, amorphous (7631-86-9)

Depending on color, may also contain:

Alumina hydrate (21645-51-2)
Aluminum (7429-90-5)
Antimony chromium manganese titanium brown rutile (6991-68-0)
Barium sulfate (7727-43-7)
Black iron oxide (1317-61-9)
Carbon black (1333-86-4)
Dimethyl siloxane, trimethylsilyl-terminated (PMN871176)
Iron hydroxide oxide (20344-49-4)
Iron oxide (1309-37-1)
Magnesium ferrite (12068-86-9)
Mineral Oil (8042-47-5)
Polydimethylsiloxane (63148-62-9)
Tetrabenzo-5,10,15,20-diazaporphyrinephthalocyanine [Pigment blue 15] (57455-37-5)
Titanium dioxide (13463-67-7)

Pennsylvania

Dimethyl siloxane, hydroxy-terminated (70131-67-8)
Hydrotreated middle petroleum distillates (64742-46-7)
Silica, amorphous (7631-86-9)

Depending on color, may also contain:

Alumina hydrate (21645-51-2)
Aluminum (7429-90-5)
Antimony chromium manganese titanium brown rutile (6991-68-0)
Barium sulfate (7727-43-7)
Black iron oxide (1317-61-9)
Carbon black (1333-86-4)
C.I. Pigment Blue 29 (57455-37-5)
Dimethyl siloxane, trimethylsilyl-terminated (PMN871176)
Iron hydroxide oxide (20344-49-4)
Iron oxide (1309-37-1)
Iron oxide (1332-37-2)
Magnesium ferrite (12068-86-9)
Mineral Oil (8042-47-5)
Polydimethylsiloxane (63148-62-9)
Tetrabenzo-5,10,15,20-diazaporphyrinephthalocyanine [Pigment blue 15] (57455-37-5)
Titanium dioxide (13463-67-7)

Yellow iron oxide (51274-00-1)

16. Other Information

Disclaimer

The data contained herein is based upon information that Accumetric LLC believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements to suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.