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 4253-34-3	Weight %	ACGIH TLV	PEL	STEL
Methyltriacetoxysilane		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

Page 2 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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 throughly 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

Page 3 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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

Page 4 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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 throughly 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.

Page 5 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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 throughly 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 PointNot DeterminedSolubilityNot DeterminedEvaporation RateNot DeterminedVOC %29 g/lViscosityNot DeterminedVapor DensityNot DeterminedVapor PressureNot Determined

Page 6 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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.

Page 7 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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:

Page 8 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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)

Page 9 9 Print Rev. Date 09/06/2006 MSDS ID BOSS310 BOSS® 310 General Purpose Industrial Silicone Sealant

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.