Safety Data Sheet



Joint Filler – PART A

1. IDENTIFICATION

24 HOUR EMERGENCY ASSISTANCE	MANUFACTURER/GENERAL MSDS ASSISTANCE	
CHEM-TEL 1-800-255-3924	ONYX CONCRETE COATINGS Tel.: (888)-497-3872 1610 E. Miraloma Ave. Placentia, CA 92870	

PRODUCT IDENTIFIER / NAME: Joint Filler – PART A TYPE OF USE: Aromatic Isocyanate, Two-part polyurea elastomer

2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION:

Acute Oral Toxicity Category 4 Acute Dermal Toxicity Category 4 Skin Irritation Category 2 Eye Irritation Category 2 Skin Sensitizer Category 1 Respiratory Sensitizer Category 1 Reproductive Toxicity Category 2 TOST: Single Exposure Category 3

NFPA ratings (scale 0 – 4):

HEALTH	2
FIRE	1
REACTIVITY	1
SPECIAL	-

NFPA HAZARD RATING: 4= EXTREME 2= MODERATE 0= INSIGNIFICANT 3= HIGH 1= SLIGHT



HAZARD PICTOGRAMS:

SIGNAL WORD: Danger!

PHYSICAL APPEARANCE: Pale Yellow Liquid

HAZARD STATEMENTS:

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Overview:

INHALATION OF MDI MISTS OR VAPORS MAY CAUSE RESPIRATORY IRRITATION, BREATHLESSNESS, CHEST DISCOUMFORT AND REDUCED PULMONARY FUNCTION. OVEREXPOSURE WELL ABOVE THE PEL MAY RESULT IN BRONCHITIS, BRONCHIAL SPASMS AND PULMONARY EDEMA. LONG-TERM EXPOSURE TO ISOCYANATES HAS BEEN REPORTED TO CAUSE LUNG DAMAGE, INCLUDING REDUCED LUNG FUNCTION WHICH MAY BE PERMANENT. ACUTE OR CHRONIC OVEREXPOSURE TO ISOCYANATES MAY CAUSE SENSATION IN SOME INDIVIDUALS, RESULTING IN ALLERGIC RESPRATORY REACTIONS INCLUDING WHEEZING, SHORTNESS OF BREATH AND DIFFICULTY BREATHING. Skin: HAZARDOUS IN CASE OF SKIN CONTACT (IRRITANT, SENSITIZER). SKIN INFLAMMATION IS CHARACTERIZED BY ITCHING, SCALING OR REDDENING.

Eyes: HAZARDOUS IN CASE OF EYE CONTACT (IRRITANT).

Inhalation: HAZARDOUS IN CASE OF INHALATION (LUNG IRRITANT, LUNG SENSITIZER). Ingestion: SLIGHTLY HAZARDOUS IN CASE OF INGESTION.

Medical Conditions Aggravated by Overexposure: Preexisting conditions such as asthma, allergies, eczema, bronchitis, and other lung and skin disorders may be aggravated by exposure to the product. Results from a lifetime inhalation study in rats indicate that MDI aerosol was carcinogenic at 9 mg/m₃, the highest dose tested. This is well above the recommended TLV of 5ppb (0.05 mg/m₃). Only irritation was noted at the lower concentration of 0.2 and 1 mg/m₃. No birth defects or teratogenic effects were reported in a teratology study with rats exposed to 1, 4, and 12 mg/m₃ polymeric MDI for 6 hr/day on days 6-15 of gestation. Embryotoxicity and fetotoxicity was reported at the top dose in the presence of maternal toxicity. As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma), which will cause them to react to a later exposure to isocyanate at levels well below the PEL/TVL. Those symptoms, which include chest tightness, wheezing, cough, shortness of breath, or asthmatic attack, could be immediate of delayed up to several hours after exposure. Similar to many non-specific asthmatic responses, there are reports that once sensitized an individual can experience these symptoms upon exposure to dust, cold air or other irritants. This increased lung sensitivity can persist for weeks and in severe cases for several

years. Chronic overexposure to isocyanates has also been reported to cause lung damage, including a decrease in lung function, which may be permanent. Sensitization may e either temporary of permanent. Prolonged contact can cause reddening, swelling, rash, scaling, or blistering, in those who have developed a skin sensitization, these symptoms can develop as a result of contact with very small amount s of liquid material, or even as a result of vapor-only exposure.

Aggravated Medical Conditions:

Individuals who are sensitized to isocyanates and those with preexisting lung diseases of conditions, including nonspecific bronchial hyper reactivity or asthma, must avoid all exposure to isocyanates.

PRECAUTIONARY STATEMENTS: Do not breathe dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. Do not handle until all safety precautions have been read and understood. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention. IF SWALLOWED: Get immediate medical advice/attention. IF exposed or concerned: Get medical advice/attention. If skin irritation or rash occurs: Get medical advice/attention.

3. COMPOSITION/OCCUPATIONAL EXPOSURE LIMITS

MATERIAL OR COMPONENT

2, 4' DIPHENYLMETHANE DIISOCYANATE 4,4' DIPHENYLMETHANE DIISOCYANATE DIPHENYLMETHANE DIISOCYANATE MODIFIED MDI CAS NUMBER 5873-54-1 101-68-8 26447-40-5 **% BY WEIGHT** < 4% <50% <50%

*Occupational Exposure Limit(s), if available, are listed in Section 8.

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary Ingredient shows, the identity may be made available as provided in this standard.

4. FIRST AID MEASURES

Eyes: In case of eye contact, immediately flush eyes with large amounts of water for at least 15 minutes, keeping the eyelids open. Get immediate medical attention.

Skin Contact: Remove contaminated clothing. In case of contact, immediately wash skin with soap and plenty of water. If symptoms develop obtain medical attention. Contaminated clothing should be thoroughly cleaned. An MDI study has demonstrated that a polyglycol-based skin cleaner or corn oil may be more effective than soap and water.

Inhalation: If excessive inhalation of vapor occurs, remove patient to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, qualified personnel may administer oxygen. Get immediate medical attention.

Ingestion: If swallowed, dilute with water. **DO NOT INDUCE VOMITING.** Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

NOTES TO PHYSICIANS: There is no specific antidote to counteract the effects of MDI. Symptomatic and supportive therapy as needed. Following severe exposure medical follow-up should be monitored for at least 48 hours.

Other First Aid Procedures: Medical supervision of all employees who handle or come into contact with MDI is recommended. Pre-employment and periodic medical examinations with respiratory function test (PEV, PVC, as a minimum are suggested). Persons with asthmatic conditions chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with MDI. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to MDI, further exposure is not permissible.

5. FIRE-FIGHTING MEASURES

Flash Point: 219°C, Closed Cup.

Auto ignition: 240°C.

Flammable Limits: Not available.

Products of Combustion: Carbon Monoxide, Carbon Dioxide, Nitrous Oxide and HCN.

Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of open flames, sparks and static discharge or combustible materials.

Fire Fighting Media and Instructions: Small Fire: Use DRY chemical powder.

Large Fire: Use water spray, fog or foam. Do not use water jet.

Protective Clothing (Fire): Splash goggles. Full suit. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

Special Remarks on Fire Hazards: Reacts slowly with water to produce carbon dioxide, which may rupture closed containers. This reaction accelerates at higher temperatures.

6. ACCIDENTAL RELEASE MEASURES

For major spills call Chem-Tel (1-800-255-3924)

Small Spill and Leak: Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including appropriate respiratory protection. Evacuate the area. Prevent further leakage, spillage or entry into drains.

Large Spill and Leak: Contain and absorb large spillages onto an inert, non-flammable adsorbent carrier (such as earth or sand). Shovel into open-top drums or plastic bags for further decontamination, if necessary. Wash the spillage area with Liquid decontaminant. Test atmosphere for MDI. Neutralize small spillages with decontaminant. Remove and properly dispose of residues (see Section 13 for disposal considerations). Notify applicable government authorities if release is reportable. The CERCLA RQ for 4,4-MDI is 5000 lbs. (see CERCLA in Section 15).

Decontaminant: Preparation of Decontaminant Solution: Prepare a decontamination solution of 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide in water (5-10% sodium carbonate may be substituted for ammonium hydroxide). Follow the precautions on the supplier's material safety data sheets when preparing and using solution. Use of Decontamination Solution: Allow deactivated material to stand for at least 30 minutes before shoveling into drums. Do not tighten the bungs. Mixing with wet earth is also effective, but slower.

7. HANDLING AND STORAGE

Handling: Avoid personal contact with the product or reaction mixture. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded. The efficiency of the ventilation system must be monitored regularly because of the possibility of blockage. Avoid breathing aerosols, mists and vapors. (See Section 8 Exposure Control for details.)

Storage: Keep containers properly sealed and when stored indoors, in a well-ventilated area. Keep contents away from moisture. Due to reaction with water, producing CO2-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Do not reseal contaminated containers. Uncontaminated containers, free of moisture, may be resealed only after placing under a nitrogen blanket. Do not store in containers made of cooper, cooper alloys or galvanized surfaces.

Ideal storage temperature is 16-38°C (60-100°F).

Keep stocks of decontaminant (see Section 6) readily available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Preventive Measures: Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.
Engineering Controls: Use local exhaust ventilation to maintain airborne concentrations bellow the TLV. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of "Industrial Ventilation, a manual of Recommended Practice".

Eyes: Chemical safety goggles. If there is a potential for splashing, use a full-face shield.

Body and Hands: The following protective materials are recommended: Gloves-neoprene, nitrile rubber, butyl rubber. Thin latex disposable gloves should be avoided for repeated or long-term use. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH.

Respiratory: When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and a HEPA (P100) particulate filter may be used under certain conditions when a cartridge change-out schedule has been developed in accordance with the OSHA respiratory protection standard (29 C.F.R. 1910.134).

Personal Protection in Case of a Large Spills: Splash goggles. Full suit. Vapor respirator or a selfcontained breathing apparatus. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name	Exposure Limits	
4,4-Diphenylmethane Diisocyanate	ACGIH TLV	0.05 mg/m3 (8-hour, 40 hours/week)
	OSHA PEL Ceiling Limit	0.20 mg/m3
	NIOSH REL/TWA	0.05 mg/m3 (10-hour, 40 hours/week)
	NIOSH REL/CEILING	0.20 mg/m3 (10-minutes)

Exposure control/ personal protection: Medical supervision of all employees who handle or come in contact with respiratory sensitizers is recommended. Persons with respiratory problems including asthmatic-type conditions, chronic bronchitis, other chronic respiratory diseases or recurrent skin eczema or skin allergies should be evaluated for their suitability of working with this product. Once a person is diagnosed as sensitized, no further exposure to the material that caused the sensitization should be permitted. The Occupational Exposure limits do not apply to previously sensitized individuals.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR BOILING POINT (°C) MELTING POINT (°F/°C) SPECIFIC GRAVITY (WATER = 1) BULK DENSITY pH VAPOR PRESSURE (MM Hg.) VAPOR DENSITY (AIR-1) VISCOSITY PERCENT (%) VOC FLASH POINT Pale Yellow Liquid Slightly Musty 208°C @5 mmHg for MDI Not available 1.19 gr/ml 10.1 lb/gal Not applicable 0.000004 mmHg @ 25°C 8.5 900-1300 cps @ 25° C 0% >110°C (230°F) Closed Cup

10. STABILITY AND REACTIVITY

Stability: Stable at room temperature.

Incompatibility with various Substances: Reactive with moisture.

Conditions of Instability: Avoid high temperatures. Avoid freezing.

Hazardous Decomposition Products: Carbon Monoxide, Carbon Dioxide, Nitrous Oxide and HCN. Hazardous Polymerization: Polymerization may occur at elevated temperatures in the presence of alkalies, tertiary amines and metal compounds.

11. TOXICOLOGICAL INFORMATION

Toxicity to Animals:

LD50 Rat Oral: >5000mg/kg LD50 Rabbit Dermal: >5000 mg/kg

Inhalation: This product is a respiratory irritant and potential respiratory sensitizer. Repeated inhalation of vapor or aerosol at levels above the occupational exposure limit could cause respiratory sensitization. Symptoms may include irritation to the eyes, nose, throat and lungs, possibly combined with dryness of the throat, tightness of chest and difficulty in breathing. The onset of the respiratory symptoms may be delayed for several hours after exposure. A hyper-reactive response to even minimal concentrations of MDI may develop in sensitized persons.

Skin Contact: Moderate irritant. Repeated and/or prolonged contact may cause skin sensitization. There is limited evidence from animal studies that skin contact may play a role in respiratory sensitization. These results emphasize the need for protective clothing including gloves to be worn at all times when handling these chemicals or in maintenance work.

Eye Contact: The vapor, aerosol, and liquid are irritant.

Ingestion: Ingestion may cause irritation of the gastrointestinal tract. Based on the acute oral LD50 this product is considered practically non-toxic by ingestion.

Remarks: Short term test have shown that it is unlikely to be genotoxic. (BUTYLATEDHYDROXYTOLUENE)

Carcinogenic Effects: The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSHA, and not listed as carcinogens by NTP.

Mutagenic Effects: There is no substantial evidence of mutagenic potential.

Reproductive Effects: No adverse reproductive effects are anticipated.

Teratogenic Effects: No birth defects were seen in two independent animal (rat) studies. Fetotoxicity was observed at doses that were extremely toxic (including lethal) to the mother. Fetotoxicity was not observed at doses that were not maternally toxic. The doses used in these studies were maximal respirable concentrations well in excess of the defined limits.

Remark: A study was conducted where groups of rats were exposed for 6 hours/day, 5 days/week for a lifetime to atmosphere of respirable polymeric MDI aerosol at concentrations of 0, 0.2, 1 or 6 mg/m3. No adverse effects were observed at 0.2 mg/m3. At the 1mg/m3 concentration, minimal nasal and lung irritant effect were seen. Only at the top concentration (6.0 mg/m3) was there an increased incidence of a benign tumor of the lung (adenoma). One malignant pulmonary tumor (adenocarcinoma) was seen in the 6.0 mg/m3 group. MDI administration to rats in this study did not change the distribution and incidence of tumors from those seen in control animals. The increased incidence of lung tumors is associated with prolonged respiratory irritation and the concurrent accumulation of yellow material in the lung. In the absence of prolonged exposure to high concentration leading to chronic irritation and lung damage, it is highly unlikely that tumor formation will occur. There are reports that excessive chronic exposure to diisocyanates may result in permanent decrease in lung function.

12. ECOLOGICAL INFORMATION

Ecotoxicity: Polymeric MDI. LC50 (Zebra Fish) >1000 ml/l. EC50 (Daphnia magna) (24 hours) >1000 mg/l EC50 (E. Coli) > 100ml/l.

Environmental Fate and Distribution: It is unlikely that significant environmental exposure in the air or water will arise based on consideration of the production and use of the substance.

Persistence and Degradation: Immiscible with water, but will react with water to produce inert and nonbiodegradable solids.

13. DISPOSAL CONSIDERATIONS

Waste Information: The generation of waste should be avoided or minimized wherever possible. Disposal should be in accordance with local, state, provincial or national regulations, This material is not hazardous waste under RCRA 40 CFR 261. Small quantities should be treated with a decontaminant solution (see Section 6). The treated waste is not a hazardous material under RCRA 40 CFR 261. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways. Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

14. TRANSPORT INFORMATION

Transportation Emergency Number: (CHEM-TEL 1-800-255-3924).

DOT Classification: Single containers less than 5000 lbs. are not regulated. Single containers with 5000 lbs. Or more of 4,4-Methylene Diphenyl Diisocyanate are regulated as: Other Regulated Substances, Liquid, N.O.S. (Methylene Diphenyl Diisocyanate), 9, NA3082, PGIII, RQ.

TDG Classification: Not regulated.

IMO/IMDG Classification: Not regulated.

ICAO/IATA Classification: Not regulated.

15. REGULATORY INFORMATION

U.S. Federal Regulations

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

HCS Classification:	Class: Toxic
	Class: Irritating substance.
	Class: Sensitizing substance.
	TSCA 8(b) inventory: All Ingredients Listed
	EPCRA Section 313 (40 CFR 372)

CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): 4,4-Methylene diphenyl diisocyanate (CAS 101-68-8) has 5000 lb. RQ (reportable quantity). Any spills or releases above the RQ must be reported to the National Response Center (800-424-8802). This product does not contain nor is it manufactured with ozone depleting substances.

State Regulations: California prop. 65: No ingredients listed.

Canadian Regulations: This material has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and this MSDS (Material Safety Data Sheet) contains all the information required by the CPR.

WHMIS (Canada): Class D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). Class D-2A: Material causing other toxic effects (VERY TOXIC). Class D-2B: Material causing other toxic effects (TOXIC).

CEPA: DSL/NDSL: All Ingredients Listed.

16. OTHER INFORMATION

Date Revised: 05/05/2015

MANUFACTURER'S NAME AND ADDRESS: ONYX CONCRETE COATINGS 1610 E. Miraloma Ave. Placentia, CA 92870 Telephone: 714-572-6723

The information herein is given in good faith, but no warranty expressed or implied is made. Onyx Concrete Coatings urges users of this product to evaluate its suitability and compliance with local regulations as Onyx cannot foresee the nature of the final application nor final location of usage.

Safety Data Sheet



Joint Filler – PART B

1. IDENTIFICATION

24 HOUR EMERGENCY ASSISTANCE	MANUFACTURER/GENERAL MSDS ASSISTANCE	
CHEM-TEL 1-800-255-3924	ONYX CONCRETE COATINGS Tel.: (888)-497-3872 1610 E. Miraloma Ave. Placentia, CA 92870	

PRODUCT IDENTIFIER / NAME: Joint Filler – PART B TYPE OF USE: Polyol blend, Two-part polyurea elastomer

2. HAZARD(S) IDENTIFICATION

HAZARD CLASSIFICATION:

Acute Oral Toxicity Category 5 Skin Irritation Category 2 Eye Irritation Category 2 Respiratory Sensitizer Category 1 Skin Sensitizer Category 1

NFPA ratings (scale 0 - 4):

HEALTH	1
FIRE	1
REACTIVITY	0
SPECIAL	-

NFPA HAZARD RATING:

4= EXTREME 2= MODERATE 0= INSIGNIFICANT 3= HIGH 1= SLIGHT



HAZARD PICTOGRAMS:

SIGNAL WORD: Warning

PHYSICAL APPEARANCE: Milky gray or colored liquid with faint odor

HAZARD STATEMENTS:

This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).

Potential Acute Health Effects:

Eyes Corrosive to eyes.

Skin Corrosive to skin on contact. Skin contact may produce burns.

Inhalation Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking or shortness of breath.

Ingestion May cause burns to mouth, throat and stomach.

GENERAL INFORMATION: Read the entire MSDS for more thorough evaluation of the hazards.

PRECAUTIONARY STATEMENTS: Use personal protective equipment as required to minimize repeated skin exposure. Wash thoroughly after handling. If skin irritation or rash occurs: Wash with plenty of soap and water and avoid repeated exposure. IF ON SKIN: Wash with plenty of soap and water.

3. COMPOSITION/OCCUPATIONAL EXPOSURE LIMITS

MATERIAL OR COMPONENT PROPRIETARY COMPONENT GLYCOLS TRIETHYLENE DIAMINE CAS NUMBER Mixture Mixture 280-57-9 **% BY WEIGHT** 65-90 % 0-15 % 0-1%

*Occupational Exposure Limit(s), if available, are listed in Section 8.

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). In addition, other substances not Hazardous per this OSHA Standard may be listed. Where proprietary Ingredient shows, the identity may be made available as provided in this standard.

4. FIRST AID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of eye contact, immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: In case of contact, immediately wash skin with soap and plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation: If excessive inhalation of vapor occurs, remove to fresh air. If breathing is difficult, qualified personnel may administer oxygen. Get medical attention immediately.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Notes to Physician: Symptomatic treatment and supportive therapy as indicated. Administer oxygen if necessary. Following severe exposure, the patient should be kept under medical review for at least 48 hours as delayed pulmonary edema may develop.

5. FIRE-FIGHTING MEASURES

Flash Point: >212°F Closed Cup Auto Ignition Temp: Not available. Flammable Limits: Not available. Products of Combustion: Thermal Decomposition products are toxic and may include oxides of carbon and nitrogen, amines, possibly other irritating gases.

Fire Fighting Media and Instructions:

SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. **Protective Clothing (Fire):** Splash goggles. Full suit. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product.

6. ACCIDENTAL RELEASE MEASURES

For major spills call Chem-Tel (1-800-255-3924)

See Safety Data Sheet section 8 Personal Protective Equipment Small Spill and Leak Absorb with an inert material and put the material in an appropriate waste disposal

container.

Large Spill and Leak Corrosive liquid. Toxic liquid.

Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements of confined area; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

7. HANDLING AND STORAGE

Handling Do not ingest. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. **Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Preventive Measures Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering Controls Use local exhaust ventilation to maintain airborne concentrations bellow the TLV. Suitable respiratory equipment should be used in case of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of 'Industrial Ventilation, a manual of Recommended Practice.'

Personal Protection

Eyes Chemical safety goggles. If there is a potential for splashing, use a full-face shield.

Body and Hands Full chemical suit. Gloves.

Respiratory Wear appropriate respirator when ventilation is inadequate.

Personal Protection in case of a Large Spill

Splash goggles. Full suit. Vapor respirator or a self-contained breathing apparatus. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. **Product Name** Exposure Limits

Product NameExposeNoneNone

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR BOILING POINT (°F/°C) MELTING POINT (°F/°C) SPECIFIC GRAVITY (WATER = 1) BULK DENSITY pH OF UNDILUTED PRODUCT Milky clear or pigmented liquid with slight odor Not determined 1.08 8.27 lb/gal Not determined Not determined >1 900-1300 cps @ 25° C 0 Soluble

10. STABILITY AND REACTIVITY

Stability and Reactivity This product is stable. **Conditions of Stability** Avoid moisture to protect product quality. **Incompatibility with Various Substances** Slightly reactive to reactive with oxidizing agents, alkalis.

11. TOXICOLOGICAL INFORMATION

No Data Available

12.	ECO	LOGIC/	AL INFO	ORMATION
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Environmental Fate: No Data Available

Bioaccumulation: No Data Available

Biodegradation: No Date Available

13. DISPOSAL CONSIDERATIONS

Waste Information: Incinerate or landfill in a licensed facility. Do not discharge into waterways of sewer systems. Container Disposal: Steel drums must be emptied (as defined by RCRA, Section 261.7 or state regulations that may be more stringent) and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approve landfill. Drums destined for scrap dealer of landfill must be punctured or crushed to prevent reuse.

Material for disposal should be placed in appropriated sealed containers to avoid potential human and environmental exposure. It is the responsibility of the generator to comply with all federal, state, provincial and local laws and regulations. We recommend that you contact an appropriate waste disposal contractor and environmental agency for relevant laws and regulations. Under the US, Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets relevant waste classification and to assure proper disposal.

14. TRANSPORT INFORMATION

Transportation Emergency Number: (CHEM-TEL 1-800-255-3924).

DOT Classification Non-Regulated TDG Classification Non-Regulated IMO/IMDG Classification Non-Regulated ICAO/IATA Classification Non-Regulated

15. REGULATORY INFORMATION

U.S. Federal Regulations This material is classified as hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200). HCS Classification

Class: Corrosive material TSCA 8(b) inventory: All ingredients Listed. CERCLA (Comprehensive Environmental Response, Compensation and Liability Act): SARA 313 toxic chemical notification and release reporting: None State RegulationsCanadian RegulationsThis product has been classified in accordance with the hazard criteria of the CPR(Controlled Products Regulations) and this MSDS (Material Safety Data Sheet) contains all theinformation required by the CPR.WHMIS (Canada)Class D-1B: Material causing immediate and serious toxic effects (Toxic).
Class D-2B: Material causing other toxic effects (Toxic).CEPADSL/NDSL Not all Ingredients Listed.

16. OTHER INFORMATION

Date Revised: 05/05/2015

MANUFACTURER'S NAME AND ADDRESS: ONYX CONCRETE COATINGS 1610 E. Miraloma Ave. Placentia, CA 92870 Telephone: 714-572-6723

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