


SAFETY DATA SHEET

SILOXANE 12

Section 1: PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Name:	Siloxane 12
Product Form:	Mixture
1.2 Product Use:	Water Repellent for Masonry and Concrete
1.3 Supplier/Manufacturer:	Umaco, Inc. 60 Rear Newhall Street Lowell, MA 01852 Phone: 978-453-8881
1.4 Emergency Number:	CHEMTREC (800) 424-9300

Section 2: HAZARDS IDENTIFICATION

2.1 OSHA/HCS Status:	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
2.2 Classification of the Substance:	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS), hearing organs, kidneys and liver) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 26%
2.3 GHS Label Elements: Hazard Pictogram:	
Single Word:	Warning
Hazard Statement:	Flammable liquid and vapor. Harmful in contact with skin or if inhaled. Causes serious eye irritation. Causes skin irritation. Suspected of damaging the unborn child. Suspected of causing cancer. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), hearing organs, kidneys, liver)

Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Wash hands thoroughly after handling.
Response:	Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention. 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 attention.
Storage:	Store locked up. Store in a well-ventilated place. Keep cool.
Disposal:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
2.4 Additional Information: Supplemental label elements:	Repeated exposure to high vapor concentrations may cause irritation of the respiratory system and permanent brain and nervous system damage. Inhalation of vapor/aerosol concentrations above the recommended exposure limits causes headaches, drowsiness and nausea and may lead to unconsciousness or death. Avoid contact with skin and clothing. Wash thoroughly after handling. Emits toxic fumes when heated.
Hazards not otherwise classified:	Prolonged or repeated contact may dry skin and cause irritation.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures:		
Ingredient	CAS #	Ingredient Percent
Acetone	67-64-1	55-65 by weight
Mineral Spirits	64741-85-7	20-30 by weight
Proprietary	N/A	5-15 by weight

The exact percentage (concentration) or chemicals has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.

Section 4: FIRST AID MEASURES

4.1 Description of First Aid Measures:	If ingestion, irritation, any type of overexposure or symptoms of overexposure occur during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth to an unconscious or convulsing person.
Eye contact:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Skin contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
4.2 Most Important Symptoms & Effects both Acute & Delayed:	
Potential Acute Health Effects	
Eye contact:	Causes serious eye irritation.
Inhalation:	Harmful if inhaled. May cause respiratory irritation.
Skin contact:	May cause skin irritation.
Ingestion:	No known significant effects or critical hazards.
Over-Exposure Signs/Symptoms	
Eye contact:	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation:	Adverse symptoms may include the following: respiratory tract irritation coughing reduced fetal weight increase in fetal deaths skeletal malformations
Skin contact:	Adverse symptoms may include the following: irritation redness dryness cracking reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion:	Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations
4.3 Indication of Any Immediate Medical Attention and Special Treatments Needed:	
Note to Physicians:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific Treatments:	No specific treatment.
Protection of First-Aiders:	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:	
Suitable Extinguishing Media:	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable Extinguishing Media:	Do not use water jet
5.2 Special Hazards Arising From the Chemical:	Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous Thermal Decomposition Products:	Decomposition products may include the following materials: carbon dioxide carbon monoxide
5.3 Special Protective Actions and Equipment for Fire Fighters:	

Special Protective Actions for Fire-Fighters:	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Special Protective Equipment for Fire-Fighters:	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:	
For non-emergency personnel:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For no emergency personnel".
Environmental precautions:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.2 Methods and Materials for Containment/Cleanup:	Take up with absorbent material (e.g. sand, universal binder). Dispose of absorbed material in accordance with the regulations.
Small spill:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large Spill	<p>Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.</p>
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Section 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:	
Protective Measures:	<p>Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.</p>
Special Precautions:	<p>Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Vapors are heavier than air and may spread along floors. If this material is part of a multiple component system, read the Safety Data Sheet(s) for the other component or components before blending as the resulting mixture may have the hazards of all of its parts.</p>

Advice on general occupational hygiene:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for Safe Storage, Including Any Incompatibilities:	Do not store above the following temperature: 35°C (95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control Parameters:	
Occupational Exposure Limits	
Ingredient Name	Exposure Limits
Mineral Spirits	ACGIH TLV-TWA: 100 ppm OSHA PEL: 500 ppm
Acetone	ACGIH TLV-TWA: 500 ppm OSHA PEL: 500 ppm

Consult local authorities for acceptable exposure limits

Recommended Monitoring Procedures:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate Engineering Controls:	Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental Exposure Controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual Protections Measures:	
Hygiene measures:	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection:	Chemical splash goggles.
Hand protection:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear antistatic protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties:	
Physical State:	Liquid
Color:	Clear
Odor:	Hydrocarbon odor
Odor Threshold:	No data
pH:	No data
Viscosity:	No data
Volatility:	No data
Boiling Point:	130°F (54.4°C)
Flash Point:	0°F (-19°C)
Flash Point Method:	Tag Closed Cup
Evaporation Rate:	No data
Flammability:	Flammable liquid
Material Supports Combustion:	Yes
Vapor Pressure:	4.8 mmHg
Vapor Density:	4.8 (Air = 1)
Relative Density:	No data
Density:	No data
Melting Point:	No data
Specific Gravity:	0.79 - 0.82
Lower Explosion Limit:	No data
Upper Explosion Limit:	No data
Solubility:	Negligible
Partition coefficient (n-octanol/water):	No data
Auto-ignition Temperature:	No data
Decomposition Temperature:	No data
Volatile Organic Compounds:	Maximum VOC content 249 gm/l

Section 10: STABILITY AND REACTIVITY

10.1 Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical Stability:	The product is stable.
10.3 Possibility of Hazardous Reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid:	When exposed to high temperatures may produce hazardous decomposition products. Refer to protective measures listed in sections 7 and 8.
10.5 Incompatible Materials:	Keep away from the following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
10.6 Hazardous Decomposition Products:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Section 11: TOXICOLOGICAL INFORMATION

ACETONE	
Eye:	Eye - rabbit; Standard Draize test. : 20 mg; Severe. Eye - rabbit; Standard Draize test. : 10 uL; Mild..
Skin:	Skin - rabbit; Open irritation test : 395 mg; Mild.. Skin - rabbit; Standard Draize test. : 500 mg/24H; Mild..
Inhalation:	Inhalation - rat LC50: 50100 mg/m ³ /8H; Details of toxic effects not reported other than lethal dose value Inhalation - rat TCLo: 30000 mg/m ³ /2H; Behavioral - Alteration of classical conditioning Inhalation - mouse LC50: 44 gm/m ³ /4H; Details of toxic effects not reported other than lethal dose value
Ingestion:	Oral - rat LD50: 5800 mg/kg; Behavioral - Altered sleep time (including change in righting reflex) Behavioral - Tremor Oral - mouse LD50: 3 gm/kg; Details of toxic effects not reported other than lethal dose value

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	No product ecological data
Environmental Fate:	No product ecological data

Section 13: DISPOSAL CONSIDERATION

Disposal Method:	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Disposal should be in accordance with applicable regional, national and local laws and regulations. Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees. Section 6. Accidental release measures

Section 14: TRANSPORTATION INFORMATION

14.1 UN Number:	UN1139
14.2 UN Proper Shipping Name:	Coating solution
14.3 Transport Hazard Class (ES):	3
14.4 Packing Group:	II
14.5 Environmental Hazards:	Not Applicable
14.6: Transport in Bulk According to Annex II or Marpol 73/78 and the IBC Code:	Not Applicable
14.7 Special Precautions for User:	Do not handle until all safety precautions have been read and understood

Section 15: REGULATORY INFORMATION

Acetone	
TSCA Inventory Status:	Listed
Canada DSL:	Listed
Mineral Spirits	
Canada DSL:	Listed

NFPA Ratings

NFPA Health: 2

NFPA Flammability: 3

NFPA Reactivity: 1

NFPA Other: X

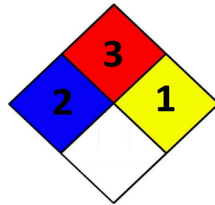
HMIS Ratings

Health: 2

Flammability: 3

Reactivity: 1

Personal Protection: X

**Section 16: OTHER INFORMATION**

Date of Preparation:	July 1, 2015
Version:	1.0
Revision Date:	July 1, 2015
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