

# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>SEALANT 16X</b>	
<b>Other means of identification</b>		
<b>Product code</b>	800-0027	
<b>Recommended use</b>	Industrial Leak Sealant.	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Company name</b>	Team Industrial Services, Inc.	
<b>Address</b>	200 Hermann Drive, Alvin, Texas 77511	
<b>Telephone</b>	Not available.	
<b>E-mail</b>	Not available.	
<b>Emergency phone number</b>	CHEMTREC - 24 HOURS:	800-424-9300 (USA)
	International:	+1 703-527-3887 (Collect)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Reproductive toxicity (the unborn child, fertility)	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure (inhalation)	Category 2 (Neurologic system, Auditory organ)
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3
<b>OSHA defined hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes skin irritation. Causes eye irritation. Suspected of damaging fertility or the unborn child. May cause drowsiness or dizziness. May cause damage to organs (Neurologic system, Auditory organ) through prolonged or repeated exposure by inhalation. Harmful to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	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. Do not breathe mist or vapor. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Avoid release to the environment.
<b>Response</b>	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.

<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Chemical name	CAS number	%
Toluene	108-88-3	25-50
Graphite	7782-42-5	10-25
Quartz	14808-60-7	10-25
Carbon fiber	7440-44-0	1-5

**Composition comments** All concentrations are in percent by weight.

### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Get medical attention if any discomfort occurs.
<b>Skin contact</b>	Flush thoroughly with water for at least 15 minutes. If irritation occurs, get medical assistance. Remove contaminated clothing and shoes.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Never give anything by mouth to a victim who is unconscious or is having convulsions. Only induce vomiting at the instruction of medical personnel. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention if any discomfort continues.
<b>Most important symptoms/effects, acute and delayed</b>	Vapors may cause drowsiness and dizziness. Skin irritation. Dry skin. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness, and tearing of eyes.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Extinguish with foam, carbon dioxide, dry powder or water fog.
<b>Unsuitable extinguishing media</b>	No restrictions known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.
<b>Fire fighting equipment/instructions</b>	Ventilate closed spaces before entering them. Containers should be cooled with water to prevent vapor pressure build up. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Evacuate area and fight fire from a safe distance. Stop leak if you can do so without risk. Move containers from fire area if you can do it without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	The product is combustible.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Ensure adequate ventilation. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid inhalation of vapors/mist and contact with skin and eyes. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
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**Methods and materials for containment and cleaning up**

Stop the flow of material, if this is without risk. Eliminate all ignition sources. Scrape up spillage or absorb with absorbing material. DO NOT use combustible materials such as sawdust. Clean contaminated surface thoroughly.

Never return spills to original containers for re-use. This material and its container must be disposed of as hazardous waste. Collect and dispose of spillage as indicated in Section 13 of the SDS.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not contaminate water. Environmental manager must be informed of all major spillages.

**7. Handling and storage****Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use only with adequate ventilation. Pregnant women should not work with the product, if there is the least risk of exposure. Avoid inhalation of vapors/mist and contact with skin and eyes. The product is combustible. Do not smoke and do not spray near a naked flame or other sources of ignition. Use personal protective equipment as required.

**Conditions for safe storage, including any incompatibilities**

Keep away from heat, spark, open flames and other sources of ignition. Keep away from sources of ignition - No smoking. Store in a cool, dry, well-ventilated place. Store in a closed container away from incompatible materials.

**8. Exposure controls/personal protection****Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	PEL	5 mg/m <sup>3</sup>	Respirable fraction.
		15 mg/m <sup>3</sup>	Total dust.

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

Components	Type	Value
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
Carbon fiber (CAS 7440-44-0)	TWA	15 mppcf	
Graphite (CAS 7782-42-5)	TWA	15 mppcf	
Quartz (CAS 14808-60-7)	TWA	0.3 mg/m <sup>3</sup>	Total dust.
		0.1 mg/m <sup>3</sup>	Respirable.
		2.4 mppcf	Respirable.

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	2 mg/m <sup>3</sup>	Respirable fraction.
Quartz (CAS 14808-60-7)	TWA	0.025 mg/m <sup>3</sup>	Respirable fraction.
Toluene (CAS 108-88-3)	TWA	20 ppm	

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value	Form
Carbon fiber (CAS 7440-44-0)	TWA	2.5 mg/m <sup>3</sup>	Respirable.
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m <sup>3</sup>	Respirable.
Quartz (CAS 14808-60-7)	TWA	0.05 mg/m <sup>3</sup>	Respirable dust.
Toluene (CAS 108-88-3)	STEL	560 mg/m <sup>3</sup>	
		150 ppm	
		375 mg/m <sup>3</sup>	
	TWA	100 ppm	

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

## ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*
	0.03 mg/l	Toluene	Urine	*
	0.02 mg/l	Toluene	Blood	*

\* - For sampling details, please see the source document.

**Exposure guidelines** No exposure standards allocated.

### US - California OELs: Skin designation

Toluene (CAS 108-88-3) Can be absorbed through the skin.

### US - Minnesota Haz Subs: Skin designation applies

Toluene (CAS 108-88-3) Skin designation applies.

**Appropriate engineering controls** Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear approved safety goggles.

#### Skin protection

**Hand protection** Wear protective gloves. Polyvinyl alcohol gloves are recommended. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

#### Skin protection

**Other** Wear appropriate chemical resistant clothing to prevent any possibility of skin contact.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. 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

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

**Appearance** Black pliable semi-solid with solvent odor.

#### Physical state

Paste.

#### Form

Pliable semi-solid.

#### Color

Black.

#### Odor

Solvent.

#### Odor threshold

0.5 - 23 ppm (Toluene)

#### pH

Not available.

#### Melting point/freezing point

Not available.

#### Initial boiling point and boiling range

230 °F (110 °C) (solvent)

#### Flash point

190.0 °F (87.8 °C)

#### Evaporation rate

1 (Butyl acetate=1)

#### Flammability (solid, gas)

Not available.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

**Flammability limit - upper (%)** Not available.

**Explosive limit - lower (%)** Not available.

**Explosive limit - upper (%)** Not available.

#### Vapor pressure

6 mm Hg @ 68 F

#### Vapor density

Not available.

Relative density	0.9
<b>Solubility(ies)</b>	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## 10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Flames and sparks. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Hydrocarbons. Carbon monoxide. Carbon dioxide. Acrolein. Acids. Ketones. Aldehydes.

## 11. Toxicological information

### Information on likely routes of exposure

Inhalation	Vapors may cause drowsiness and dizziness.
Skin contact	Causes skin irritation. Prolonged or repeated contact may dry skin and cause dermatitis. Components of the product may be absorbed into the body through the skin.
Eye contact	Causes eye irritation.
Ingestion	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**  
Vapors may cause drowsiness and dizziness. Skin irritation. Dry skin. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing.

### Information on toxicological effects

**Acute toxicity** Not expected to be acutely toxic.

Components	Species	Test Results
Toluene (CAS 108-88-3)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	14.1 ml/kg
<i>Inhalation</i>		
LC50	Rat	49000 mg/m <sup>3</sup> , 4 Hours
<i>Oral</i>		
LD50	Rat	5580 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	No data available.	
<b>Skin sensitization</b>	Not a skin sensitizer.	
<b>Germ cell mutagenicity</b>	No data available.	
<b>Carcinogenicity</b>	Inhalation of quartz dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Quartz (CAS 14808-60-7)	1 Carcinogenic to humans.	
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.	

## NTP Report on Carcinogens

Quartz (CAS 14808-60-7)

Known To Be Human Carcinogen.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

<b>Reproductive toxicity</b>	Suspected of damaging the unborn child.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness or dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	May cause damage to organs (Neurologic system, Auditory organ) through prolonged or repeated exposure by inhalation.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Chronic effects</b>	Danger of serious damage to health by prolonged exposure. Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain.
<b>Further information</b>	The intended use of this product does not include grinding.

## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Components	Species	Test Results	
Toluene (CAS 108-88-3)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	LC50	Daphnia magna	11.5 mg/l, 48 hours
Fish	LC50	Oncorhynchus kisutch	5.5 mg/l, 96 hours
<i>Chronic</i>			
Crustacea	NOEC	Ceriodaphnia dubia	0.74 mg/l, 7 days
Fish	NOEC	Oncorhynchus kisutch	1.4 mg/l, 40 days

**Persistence and degradability** No data available.

**Bioaccumulative potential** No data available on bioaccumulation.

### Partition coefficient n-octanol / water (log Kow)

Toluene (CAS 108-88-3) 2.73

**Mobility in soil** Expected to have low mobility in soil.

**Mobility in general** The product has poor water-solubility.

**Other adverse effects** The product contains a substance which has a photochemical ozone creation potential.

## 13. Disposal considerations

**Disposal instructions** Dispose of this material and its container to hazardous or special waste collection point. Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**Hazardous waste code** Waste codes should be assigned by the user based on the application for which the product was used.

**Waste from residues / unused products** Dispose of in accordance with local regulations.

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied.

## 14. Transport information

### DOT

<b>UN number</b>	UN1325
<b>UN proper shipping name</b>	Flammable solids, organic, n.o.s. (contains absorbed toluene)
<b>Transport hazard class(es)</b>	
<b>Class</b>	4.1
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	4.1
<b>Packing group</b>	III
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.  
**Special provisions** A1, IB8, IP3, T1, TP33  
**Packaging exceptions** 151  
**Packaging non bulk** 213  
**Packaging bulk** 240

**IATA**

**UN number** UN1325  
**UN proper shipping name** Flammable solid, organic, n.o.s. (contains absorbed toluene)  
**Transport hazard class(es)**  
    **Class** 4.1  
    **Subsidiary risk** -  
    **Label(s)** 4.1  
**Packing group** III  
**Environmental hazards** No  
**ERG Code** 3L

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**IMDG**

**UN number** UN1325  
**UN proper shipping name** FLAMMABLE SOLID, ORGANIC, N.O.S. (contains absorbed toluene)  
**Transport hazard class(es)**  
    **Class** 4.1  
    **Subsidiary risk** -  
    **Label(s)** 4.1  
**Packing group** III  
**Environmental hazards**

**Marine pollutant** No

**EmS** F-A, S-G

**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

**15. Regulatory information**

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

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Toluene (CAS 108-88-3) LISTED

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

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - Yes  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** Yes

**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Toluene	108-88-3	25-50

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Toluene (CAS 108-88-3)

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Toluene (CAS 108-88-3) 6594

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number**

Toluene (CAS 108-88-3) 594

**US state regulations****US. Massachusetts RTK - Substance List**

Carbon fiber (CAS 7440-44-0)

Graphite (CAS 7782-42-5)

Quartz (CAS 14808-60-7)

Toluene (CAS 108-88-3)

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

Carbon fiber (CAS 7440-44-0)

Graphite (CAS 7782-42-5)

Quartz (CAS 14808-60-7)

Toluene (CAS 108-88-3)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Carbon fiber (CAS 7440-44-0)

Graphite (CAS 7782-42-5)

Quartz (CAS 14808-60-7)

Toluene (CAS 108-88-3)

**US. Rhode Island RTK**

Toluene (CAS 108-88-3)

**US. California Proposition 65**

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Quartz (CAS 14808-60-7)

Toluene (CAS 108-88-3)

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information, including date of preparation or last revision****Issue date** 20-October-2015**Revision date** 08-February-2016**Version #** 02**Further information** HMIS® is a registered trade and service mark of the NPCA.  
J - Goggles, Gloves, Apron, Dust, Vapor Respirator**HMIS® ratings** Health: 2\*  
Flammability: 2  
Physical hazard: 0  
Personal protection: J**References** ACGIH  
EPA: Acquire database  
NLM: Hazardous Substances Data Base  
US. IARC Monographs on Occupational Exposures to Chemical Agents  
HSDB® - Hazardous Substances Data Bank  
IARC Monographs. Overall Evaluation of Carcinogenicity  
National Toxicology Program (NTP) Report on Carcinogens  
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices



**Disclaimer**

Team Industrial Services, Inc. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

**This SDS contains revisions in the following section(s):**

2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16.