TEAM® Industrial Services

SAFETY DATA SHEET

1. Identification

Product identifier **S-180-FG PRP Sealant**

Other means of identification

Product code 900-0044

Recommended use Industrial Leak Sealant.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Company name Team Industrial Services, Inc.

Address 200 Hermann Drive, Alvin, Texas 77511

Telephone Not available.

E-mail Not available.

Emergency phone number CHEMTREC - 24 HOURS: 800-424-9300 (USA)
International: +1 703-527-3887 (Collect)

2. Hazard(s) identification

Physical hazards	Flammable liquids	Category 4
Health hazards	Skin corrosion/irritation	Category 2
	Reproductive toxicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Specific target organ toxicity, repeated exposure	Category 2 (Central nervous system)
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

OSHA defined hazards Not classified.

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies:

Label elements

Signal word Warning

Hazard statement Combustible liquid. Causes skin irritation. Suspected of damaging the unborn child. May cause damage to organs (Central nervous system) through prolonged or repeated exposure. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not breathe gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response In case of fire: Use appropriate media for extinction. If exposed or concerned: Get medical advice/attention. 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 inhaled: Remove person to fresh air and keep comfortable for breathing.

Storage Store in a well-ventilated place. Keep cool. Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) None known.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Polymer	25034-71-3	50-80
Graphite	7782-42-5	25-50
Dicumyl peroxide	80-43-3	5-10
Toluene	108-88-3	5-10
Carbon fiber	7440-44-0	1-5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Move to fresh air. Get medical attention if any discomfort occurs.

Skin contact Remove contaminated clothing and shoes. Flush thoroughly with water for at least 15 minutes. If irritation occurs, get medical assistance.

Eye contact Flush thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops or persists.

Ingestion 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 immediately.

Most important symptoms/effects, acute and delayed Skin irritation. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing. Shortness of breath.

Indication of immediate medical attention and special treatment needed Treat symptomatically.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Extinguish with foam, carbon dioxide, dry powder or water fog.

Unsuitable extinguishing media No restrictions known.

Specific hazards arising from the chemical Solvent vapors may form explosive mixtures with air. By heating and fire, corrosive vapors/gases may be formed. Carbon oxides. Silicon oxides.

Special protective equipment and precautions for firefighters 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.

Fire fighting equipment/instructions In the event of fire, cool tanks with water spray. Move containers from fire area if you can do it without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

General fire hazards The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Ventilate closed spaces before entering. Avoid inhalation of vapors and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the SDS for Personal Protective Equipment.

Methods and materials for containment and cleaning up Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas. Eliminate sources of ignition. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After removal flush contaminated area thoroughly with water. This material and its container must be disposed of as hazardous waste.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling

Pregnant or breastfeeding women must not handle this product. Avoid inhalation of vapors and contact with skin and eyes. The product is combustible, and heating may generate vapors which may form explosive vapor/air mixtures. Ground container and transfer equipment to eliminate static electric sparks. Use non-sparking tools and explosion-proof equipment. Use only with adequate ventilation. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Avoid generation and spreading of dust. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feedingstuffs.

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/m3	Respirable fraction.
		15 mg/m3	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
Graphite (CAS 7782-42-5)	TWA	15 mppcf

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
Toluene (CAS 108-88-3)	TWA	20 ppm	

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m3	Respirable.
Toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		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.
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	When material is heated, wear gloves to protect against thermal burns.
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. Private clothes and working clothes should be kept separately.

9. Physical and chemical properties

Appearance	Black pliable semi-solid with solvent odor.
Physical state	Liquid.
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)
Flash point	198.0 °F (92.2 °C) Closed Cup
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
Solubility(ies)	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	896 °F (480 °C) (Toluene)
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flash point class	Combustible IIIA

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.

Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Silicon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	High concentrations: Vapors may cause drowsiness and dizziness.
Skin contact	May cause 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	May cause eye irritation.
Ingestion	May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics	Skin irritation. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing. Shortness of breath.

Information on toxicological effects

Acute toxicity Vapors may cause drowsiness and dizziness. May cause discomfort if swallowed.

Components	Species	Test Results
Dicumyl peroxide (CAS 80-43-3)		
Acute		
Oral		
LD50	Rat	4100 mg/kg
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	14.1 ml/kg
Inhalation		
LC50	Rat	49000 mg/m³, 4 Hours
Oral		
LD50	Rat	636 mg/kg

Skin corrosion/irritation	May cause skin irritation.
Serious eye damage/eye irritation	May cause eye irritation.
Respiratory or skin sensitization	
Respiratory sensitization	Not classified.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	Not available.
Carcinogenicity	Risk of cancer cannot be excluded with prolonged exposure. When cured: Prolonged breathing of high levels of crystalline silica can cause silicosis. Also, airborne crystalline silica is possibly carcinogenic to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Toluene (CAS 108-88-3) 3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	Suspected of damaging the unborn child.
Specific target organ toxicity - single exposure	Not available.
Specific target organ toxicity - repeated exposure	May cause damage to the following organs through prolonged or repeated exposure: Central nervous system.
Aspiration hazard	Not classified.
Chronic effects	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. When cured: Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.

Further information When cured: Chronic lung disease (silicosis) and/or lung cancer may result from prolonged/repeated breathing of the dust of this material.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Components		Species	Test Results
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Pink salmon (Oncorhynchus gorbuscha)	6.86 - 8.48 mg/l, 96 hours

Persistence and degradability The product contains inorganic compounds which are not biodegradable.

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient n-octanol / water (log Kow)

Dicumyl peroxide (CAS 80-43-3)	5.5
Toluene (CAS 108-88-3)	2.73

Mobility in soil Expected to be slightly to moderately mobile in soil.

Mobility in general The product contains substances which are insoluble in water and which sediment in water systems. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

Other adverse effects Not available.

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 Not regulated.

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

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

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 listed.

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 - Yes
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	5-10

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

US. Massachusetts RTK - Substance List

Graphite (CAS 7782-42-5)
Toluene (CAS 108-88-3)

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

Graphite (CAS 7782-42-5)
Toluene (CAS 108-88-3)

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

Graphite (CAS 7782-42-5)
Toluene (CAS 108-88-3)

US. Rhode Island RTK

Toluene (CAS 108-88-3)

US. California Proposition 65

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

Toluene (CAS 108-88-3)

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 List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
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	16-March-2015
Revision date	-
Version #	01
Further information	HMIS® is a registered trade and service mark of the NPCA. I - Safety Glasses, Gloves, Dust, Vapor Respirator
HMIS® ratings	Health: 2* Flammability: 2 Physical hazard: 0 Personal protection: I
NFPA ratings	
List of abbreviations	
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	The information in the sheet was written based on the best knowledge and experience currently available.