

**TEAM** Industrial Services  
**SAFETY DATA SHEET**

### 1. Identification

**Product identifier** S-210 SF PRP SEALANT

**Other means of identification**

**Product code** 900-0037

**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  
Serious eye damage/eye irritation Category 1  
Sensitization, skin Category 1

**OSHA defined hazards** Not classified.

**Label elements**



**Signal word** Danger

**Hazard statement** Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction.  
Combustible liquid.

**Precautionary statement**

**Prevention** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wash thoroughly after handling. Avoid breathing dust/fume/mist/spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection.

**Response** In case of fire: Use appropriate media for extinction. If on skin: Wash with plenty of water. If skin irritation or rash 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. Immediately call a poison center/doctor.

**Storage** Store in a well-ventilated place. Keep cool.

**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	%
Aluminum hydroxide	21645-51-2	25-50
Aluminum oxide	1344-28-1	25-50

Phenol, polymer with formaldehyde	9003-35-4	10-25
Ethanol	64-17-5	5-10
Graphite	7782-42-5	5-10
Carbon fiber	7440-44-0	<5
m-Cresol	108-39-4	<5
p-Cresol	106-44-5	<5
2,6-Xylenol	576-26-1	<1
Hexamethylenetetramine	100-97-0	<1
Phenol	108-95-2	<1
o-Ethylphenol	90-00-6	<1

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

#### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention immediately.
<b>Skin contact</b>	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.
<b>Eye contact</b>	Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<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 immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Unconsciousness. Coughing. Shortness of breath. Irritation of nose and throat. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing.
<b>Indication of immediate medical attention and special treatment needed</b>	Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.
<b>General information</b>	Chemical burns must be treated by a physician.

#### 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>	Solvent vapors may form explosive mixtures with air. By heating and fire, corrosive vapors/gases may be formed. Carbon oxides. Silicon oxides. Formaldehyde.
<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>	In the event of fire, cool tanks with water spray. Move containers from fire area if you can do it without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Combustible liquid.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Ventilate closed spaces before entering. Avoid inhalation of vapors and contact with skin and eyes. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up. See Section 8 of the SDS for Personal Protective Equipment.
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**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. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. After removal flush contaminated area thoroughly with water.

Never return spills to original containers for re-use. 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**

Use only with adequate ventilation. Avoid inhalation of vapors and contact with skin and eyes. Wear approved safety goggles. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices. When cured: Avoid generation and spreading of dust.

**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****U.S. - OSHA**

Components	Type	Value
Carbon fiber (CAS 7440-44-0)	TWA	15 mppcf

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3	
		1000 ppm	
Graphite (CAS 7782-42-5)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
m-Cresol (CAS 108-39-4)	PEL	22 mg/m3	
		5 ppm	
p-Cresol (CAS 106-44-5)	PEL	22 mg/m3	
		5 ppm	

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

Components	Type	Value	Form
Carbon fiber (CAS 7440-44-0)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
Graphite (CAS 7782-42-5)	TWA	15 mppcf	

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Aluminum hydroxide (CAS 21645-51-2)	TWA	1 mg/m3	Respirable fraction.
Aluminum oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.
Carbon fiber (CAS 7440-44-0)	TWA	2 mg/m3	Respirable fraction.
Ethanol (CAS 64-17-5)	STEL	1000 ppm	
Graphite (CAS 7782-42-5)	TWA	2 mg/m3	Respirable fraction.
m-Cresol (CAS 108-39-4)	TWA	20 mg/m3	Inhalable fraction and vapor.
			Inhalable fraction and vapor.
p-Cresol (CAS 106-44-5)	TWA	20 mg/m3	Inhalable fraction and vapor.

## 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.
Ethanol (CAS 64-17-5)	TWA	1900 mg/m <sup>3</sup> 1000 ppm	
Graphite (CAS 7782-42-5)	TWA	2.5 mg/m <sup>3</sup>	Respirable.
m-Cresol (CAS 108-39-4)	TWA	10 mg/m <sup>3</sup> 2.3 ppm	
p-Cresol (CAS 106-44-5)	TWA	10 mg/m <sup>3</sup> 2.3 ppm	
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).		
<b>Exposure guidelines</b>	No exposure standards allocated.		
<b>US - California OELs: Skin designation</b>			
m-Cresol (CAS 108-39-4)		Can be absorbed through the skin.	
p-Cresol (CAS 106-44-5)		Can be absorbed through the skin.	
<b>US - Minnesota Haz Subs: Skin designation applies</b>			
m-Cresol (CAS 108-39-4)		Skin designation applies.	
p-Cresol (CAS 106-44-5)		Skin designation applies.	
<b>US - Tennessee OELs: Skin designation</b>			
m-Cresol (CAS 108-39-4)		Can be absorbed through the skin.	
p-Cresol (CAS 106-44-5)		Can be absorbed through the skin.	
<b>US ACGIH Threshold Limit Values: Skin designation</b>			
m-Cresol (CAS 108-39-4)		Can be absorbed through the skin.	
p-Cresol (CAS 106-44-5)		Can be absorbed through the skin.	
<b>US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)</b>			
m-Cresol (CAS 108-39-4)		Can be absorbed through the skin.	
p-Cresol (CAS 106-44-5)		Can be absorbed through the skin.	
<b>Appropriate engineering controls</b>	Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. An eye wash and safety shower must be available in the immediate work area.		
<b>Individual protection measures, such as personal protective equipment</b>			
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles) and a face shield.		
<b>Skin protection</b>			
<b>Hand protection</b>	Wear protective gloves. Butyl rubber gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.		
<b>Other</b>	Wear appropriate clothing to prevent possibility of skin contact.		
<b>Respiratory protection</b>	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.		
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.		
<b>General hygiene considerations</b>	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

<b>Appearance</b>	Black pliable semi-solid with phenolic odor.
<b>Physical state</b>	Liquid.
<b>Form</b>	Pliable semi-solid.
<b>Color</b>	Black.
<b>Odor</b>	Phenolic.
<b>Odor threshold</b>	0.003 - 5 ppm (m-Cresol)
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	Not applicable.
<b>Initial boiling point and boiling range</b>	Not applicable.

<b>Flash point</b>	160.0 °F (71.1 °C) Tag Closed Cup
<b>Evaporation rate</b>	Not available.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slightly.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	Flames and sparks.
<b>Incompatible materials</b>	Strong oxidizers, strong acids, and strong bases. Strong reducing agents.
<b>Hazardous decomposition products</b>	Oxides of aluminum. Carbon oxides. Silicon oxides. Formaldehyde. Unidentified organic compounds.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	May cause severe respiratory tract irritation. May cause burns in mucous membranes, throat, esophagus and stomach.
<b>Skin contact</b>	Harmful in contact with skin. May cause skin burns. Components of the product may be absorbed into the body through the skin.
<b>Eye contact</b>	May cause eye burns. Risk of serious damage to eyes.
<b>Ingestion</b>	May cause digestive tract burns.

**Symptoms related to the physical, chemical and toxicological characteristics**      Unconsciousness. Coughing. Shortness of breath. Irritation of nose and throat. Irritation of eyes and mucous membranes. Symptoms include itching, burning, redness and tearing. Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.

### Information on toxicological effects

**Acute toxicity**      May cause eye, skin and respiratory tract irritation. May cause severe respiratory tract irritation. May cause damage to the liver and kidneys.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Aluminum hydroxide (CAS 21645-51-2)		
<b>Acute</b>		
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg

Components	Species	Test Results
Carbon fiber (CAS 7440-44-0)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	> 2000 mg/m3, 4 hours
Ethanol (CAS 64-17-5)		
<b>Acute</b>		
<i>Inhalation</i>		
LC50	Rat	30000 mg/m3
m-Cresol (CAS 108-39-4)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	620 mg/kg
<i>Oral</i>		
LD50	Rat	242 mg/kg
<b>Skin corrosion/irritation</b>	May cause skin burns.	
<b>Serious eye damage/eye irritation</b>	May cause eye burns. Risk of serious damage to eyes.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not available.	
<b>Skin sensitization</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	Contains a substance which may have a mutagenic effect.	
<b>Carcinogenicity</b>	Not classified.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)</b>		
Not listed.		
<b>Reproductive toxicity</b>	Contains no ingredient listed as toxic to reproduction.	
<b>Specific target organ toxicity - single exposure</b>	Not available.	
<b>Specific target organ toxicity - repeated exposure</b>	Not available.	
<b>Aspiration hazard</b>	Not classified.	
<b>Chronic effects</b>	Danger of serious damage to health by prolonged exposure. May cause damage to the liver and kidneys. When cured: Phenolic resin releases formaldehyde and formaldehyde has carcinogenic potential and is a known skin and respiratory sensitizer.	
<b>Further information</b>	Be aware that symptoms of lung edema (shortness of breath) may develop up to 24 hours after exposure.	

## 12. Ecological information

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Hexamethylenetetramine (CAS 100-97-0)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
Fish	LC50	Bleak (Alburnus alburnus)
Test Results		29868 - 43390 mg/l, 48 hours
Test Results		> 10000 mg/l, 96 hours
m-Cresol (CAS 108-39-4)		
<b>Aquatic</b>		
Crustacea	EC50	Scud (Gammarus fasciatus)
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)
Test Results		7 mg/l, 48 hours
Test Results		8.9 mg/l, 96 hours
p-Cresol (CAS 106-44-5)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna)
Test Results		7.7 mg/l, 48 hours

Components	Species	Test Results
Fish	LC50	Fish (Lepidocephalichthyes guntea) 6.15 - 7.96 mg/l, 96 hours
<b>Persistence and degradability</b>	The product contains inorganic compounds which are not biodegradable.	
<b>Bioaccumulative potential</b>	No data available on bioaccumulation.	
<b>Partition coefficient n-octanol / water (log Kow)</b>		
Ethanol (CAS 64-17-5)		-0.31
m-Cresol (CAS 108-39-4)		1.96
p-Cresol (CAS 106-44-5)		1.94
<b>Mobility in soil</b>	Expected to be slightly to moderately mobile in soil.	
<b>Mobility in general</b>	The product is slightly soluble in water. The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.	
<b>Other adverse effects</b>	The product contains volatile organic compounds which have a photochemical ozone creation potential.	

### 13. Disposal considerations

<b>Disposal instructions</b>	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.
<b>Hazardous waste code</b>	Not regulated.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	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)

Ethanol (CAS 64-17-5)	LISTED
m-Cresol (CAS 108-39-4)	LISTED
p-Cresol (CAS 106-44-5)	LISTED

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

**Hazard categories** Immediate Hazard - Yes  
Delayed Hazard - No  
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.
Aluminum oxide	1344-28-1	25-50
m-Cresol	108-39-4	<5
p-Cresol	106-44-5	<5

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

m-Cresol (CAS 108-39-4)  
p-Cresol (CAS 106-44-5)

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

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

**US state regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US. Massachusetts RTK - Substance List**

Aluminum oxide (CAS 1344-28-1)  
Ethanol (CAS 64-17-5)  
Graphite (CAS 7782-42-5)  
m-Cresol (CAS 108-39-4)  
p-Cresol (CAS 106-44-5)

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

Aluminum oxide (CAS 1344-28-1)  
Carbon fiber (CAS 7440-44-0)  
Ethanol (CAS 64-17-5)  
Graphite (CAS 7782-42-5)  
Hexamethylenetetramine (CAS 100-97-0)  
m-Cresol (CAS 108-39-4)  
p-Cresol (CAS 106-44-5)

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

Aluminum oxide (CAS 1344-28-1)  
Ethanol (CAS 64-17-5)  
Graphite (CAS 7782-42-5)  
m-Cresol (CAS 108-39-4)  
p-Cresol (CAS 106-44-5)

**US. Rhode Island RTK**

Aluminum oxide (CAS 1344-28-1)  
m-Cresol (CAS 108-39-4)  
p-Cresol (CAS 106-44-5)

**US. California Proposition 65**

Not Listed.

**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)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No



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	15-April-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: 3 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
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Disclaimer	The information in the sheet was written based on the best knowledge and experience currently available.
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