

TEAM® Industrial Services
SAFETY DATA SHEET

1. Identification

Product identifier Sealant 6XR Nuclear Grade

Other means of identification

Product code 805-0023

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 Not classified.

Health hazards Not classified.

Environmental hazards Hazardous to the aquatic environment, Category 3
long-term hazard

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Avoid release to the environment.

Response Wash thoroughly after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

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

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Distillates (petroleum), hydrotreated middle	64742-46-7	5-10
Ethyltriacetoxysilane	17689-77-9	1-5
Methyltriacetoxysilane	4253-34-3	1-5
Aluminum	7429-90-5	<= 1.6

Composition comments All concentrations are in percent by weight. Components not listed are either non-hazardous or are below reportable limits.

4. First-aid measures

Inhalation	If symptoms are experienced, remove source of contamination or move victim to fresh air. Get medical attention if irritation develops and persists.
Skin contact	Get medical attention if symptoms occur after washing.
Eye contact	Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth thoroughly. Get medical attention if any discomfort occurs.
Most important symptoms/effects, acute and delayed	Irritant effects.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	First aid personnel must be aware of own risk during rescue.

5. Fire-fighting measures

Suitable extinguishing media	Larger fires: Dry chemical, foam, water fog. Small fires: Dry chemical, CO ₂ , or water spray.
Unsuitable extinguishing media	None.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
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	Use water spray to cool unopened containers. Move containers from fire area if you can do it without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	This product is not flammable.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of vapors and contact with skin and eyes. Wear appropriate protective equipment and clothing during clean-up. In case of spills, beware of slippery floors and surfaces. 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. Scrape up spillage or absorb with absorbing material. After removal flush contaminated area thoroughly with water. Never return spills to original containers for re-use.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage

Precautions for safe handling	Provide adequate ventilation. Product in contact with water evolves acetic acid. Avoid inhalation of vapors and contact with skin and eyes. Wear protective gloves and appropriate clothing to prevent skin contact. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep containers tightly closed. Keep away from moisture. Store 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
Acetic acid (CAS 64-19-7)	PEL	25 mg/m ³ 10 ppm	
Aluminum (CAS 7429-90-5)	PEL	5 mg/m ³ 15 mg/m ³	Respirable dust. Total dust.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	PEL	5 mg/m ³	Mist.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Acetic acid (CAS 64-19-7)	STEL	15 ppm	
	TWA	10 ppm	
Aluminum (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	TWA	5 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Acetic acid (CAS 64-19-7)	STEL	37 mg/m ³	
		15 ppm	
	TWA	25 mg/m ³	
		10 ppm	
Aluminum (CAS 7429-90-5)	TWA	5 mg/m ³	Respirable.
		5 mg/m ³	Welding fume or pyrophoric powder.
		10 mg/m ³	Total
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	No exposure standards allocated.
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 safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate clothing to prevent possibility of skin contact.
Respiratory protection	Respiratory protection is not needed ambient conditions if vapor is generated when material is heated or handled, the following is advised. General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29CFR 1910.134) and use IOSH/MSHA approve respirators.
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 paste.
Physical state	Liquid.
Form	Paste.
Color	Black.
Odor	Acetic.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	> 212.0 °F (> 100.0 °C)
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	1.007 @ 25 °C
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	No data available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.

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	During curing, the product will release: Acetic acid.
Conditions to avoid	Water, moisture.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Silicon oxides. Metal oxides. This material may generate formaldehyde at temperatures greater than 150°C (300°F).

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause respiratory tract irritation.
Skin contact	May cause mild skin irritation.
Eye contact	May cause eye irritation on direct contact.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	Irritant effects.
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Information on toxicological effects

Acute toxicity	Expected to be a low hazard for usual industrial or commercial handling by trained personnel.
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Components	Species	Test Results
Aluminum (CAS 7429-90-5)		
Acute		
<i>Inhalation</i>		
LC50	Rat	> 0.888 mg/l, 4 hours
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg, 24 hours
<i>Inhalation</i>		
LC50	Rat	7640 mg/m ³ , 4 hours 1.72 mg/l, 4 hours

Skin corrosion/irritation	May cause mild skin irritation.
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Serious eye damage/eye irritation	May cause eye irritation on direct contact.
Respiratory or skin sensitization	
Respiratory sensitization	No data available.
Skin sensitization	Not a skin sensitizer.
Germ cell mutagenicity	No data available.
Carcinogenicity	Inhalation of carbon black dust may cause cancer, however due to the physical form of the product, inhalation of dust is not likely.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4)	2B Possibly carcinogenic to humans.
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	1 Carcinogenic to humans.
Silicon dioxide (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.

NTP Report on Carcinogens

Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)	Known To Be Human Carcinogen.
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OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity	No data available.
Specific target organ toxicity - single exposure	No data available.
Specific target organ toxicity - repeated exposure	No data available.
Aspiration hazard	Not classified.
Further information	Acetic acid is liberated slowly upon contact with moisture.

12. Ecological information

Ecotoxicity	Harmful to aquatic life with long lasting effects.
Persistence and degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	Expected to be slightly to moderately mobile in soil.
Mobility in general	The product is insoluble in water. The product hardens to a solid immobile substance.
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 applicable.

General information Read safety instructions, SDS and emergency procedures before handling.

15. Regulatory information

US federal regulations Contents of this SDS comply with 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)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.
Aluminum	7429-90-5	<= 1.6

Other federal regulations

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

Not regulated.

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

US. Massachusetts RTK - Substance List

Aluminum (CAS 7429-90-5)
Carbon black (CAS 1333-86-4)
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
Silicon dioxide (CAS 7631-86-9)

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

Aluminum (CAS 7429-90-5)
Carbon black (CAS 1333-86-4)
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
Silicon dioxide (CAS 7631-86-9)

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

Aluminum (CAS 7429-90-5)
Carbon black (CAS 1333-86-4)
Distillates (petroleum), hydrotreated middle (CAS 64742-46-7)
Silicon dioxide (CAS 7631-86-9)

US. Rhode Island RTK

Aluminum (CAS 7429-90-5)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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

Carbon black (CAS 1333-86-4)

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

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
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)	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	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: 0 Flammability: 0 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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