

SAFETY DATA SHEET**1. Identification**

Product identifier	TC-4A
Other means of identification	
Product code	803-0008
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	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Sensitization, skin	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. Wash thoroughly after handling. Avoid release to the environment.
Response	If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/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 advice/attention.
Storage	Store away from incompatible materials.
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	%
Reaction of Epichlorohydrin and Bisphenol	25085-99-8	49
Epoxy Phenol Novolac Resin	28064-14-4	16
2-ethylhexyl Glycidyl Ether Mixture	2461-15-6	11

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 In case of discomfort, move to fresh air. Get medical attention, if needed.

Skin contact Remove contaminated clothing. Wash immediately with soap and water for at least 15 minutes. Get medical attention promptly if symptoms persist or occur after washing. In case of allergic reaction or other skin disorders: Seek medical attention and bring along these instructions.

Eye contact 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.

Ingestion Get medical attention if any discomfort occurs.

Most important symptoms/effects, acute and delayed Causes eye irritation. Symptoms include itching, burning, redness, and tearing of eyes. Causes skin irritation. Symptoms may include redness, drying and cracking of the skin. May cause sensitization by skin contact.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and 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 Dry chemical powder. Carbon dioxide (CO₂). Foam.

Unsuitable extinguishing media Water may be ineffective.

Specific hazards arising from the chemical During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions Use standard firefighting procedures and consider the hazards of other involved materials. Cool material exposed to heat with water spray and remove it if no risk is involved.

Specific methods Move container from fire area if it can be done without risk. Use water spray to cool unopened containers. Cool containers exposed to flames with water until well after the fire is out. If possible, prevent water running into sewers. Water runoff can cause environmental damage.

General fire hazards The product is not flammable. However: Will burn if strongly heated and when involved in fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Avoid contact with skin and eyes. Avoid prolonged and repeated contact. For personal protection, see Section 8 of the SDS.

Methods and materials for containment and cleaning up Collect and dispose of spillage as indicated in Section 13 of the SDS. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Wipe up with absorbent material (e.g. cloth, fleece). Should not be released into the environment. Never return spills in original containers for re-use. Prevent product from entering drains. Containers must be labeled.

Environmental precautions Prevent entry into waterways, sewer, basements or confined areas. Environmental manager must be informed of all major spillages.

7. Handling and storage

Precautions for safe handling Do not smoke and do not spray near a naked flame or other sources of ignition. Avoid contact with skin and eyes. Wear personal protective equipment. Wash hands thoroughly after handling. Persons with epoxy allergy should not work with this product. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities Do not store near heat sources or expose to high temperatures. Store in tightly closed original container. Store in a cool and well-ventilated place. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Provide adequate ventilation.
Appropriate engineering controls	General ventilation normally adequate. Ensure adequate ventilation, especially in confined areas. Provide easy access to water supply and eye wash facilities.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear approved chemical safety goggles. Wear safety glasses with side shields.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Nitrile 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	In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact. Wear appropriate chemical resistant clothing.
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 air supplied air respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 1910.134. In case of inadequate ventilation, use 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. Personal protective equipment should not be worn during lunch breaks. Private clothes and working clothes should be kept separately.

9. Physical and chemical properties

Appearance	Paste.
Physical state	Liquid.
Form	Paste.
Color	Various colors.
Odor	Mild aromatic.
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 available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	1 at 77°F (760mm Hg)
Vapor density	4.5 (Air = 1)
Relative density	1.35
Solubility(ies)	
Solubility (water)	Negligible In water.
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	The product is stable under normal conditions of use, storage and transport.
Possibility of hazardous reactions	Will not occur by itself.
Conditions to avoid	Exposure to heat and contact with sources of ignition. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents. Strong acids. Amines. Strong alkalis.
Hazardous decomposition products	During combustion: Carbon oxides. Phenolic compounds.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause irritation of nose, throat and mucous membranes.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Causes eye irritation.
Ingestion	Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics Causes eye irritation. Symptoms include itching, burning, redness and tearing. Causes skin irritation. Sensitization. Ingestion may cause irritation and malaise.

Information on toxicological effects

Acute toxicity	Ingestion may cause irritation and malaise.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	No data available.
Skin sensitization	May cause an allergic skin reaction.

Germ cell mutagenicity No data available.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Not classified.

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.
Chronic effects	None known.

12. Ecological information

Ecotoxicity	Toxic to aquatic life with long lasting effects.
Persistence and degradability	No data available.
Bioaccumulative potential	The product is not expected to bioaccumulate.
Mobility in soil	Expected to have low mobility in soil.
Mobility in general	The product is slightly soluble in water.
Other adverse effects	No data available.

13. Disposal considerations

Disposal instructions	Dispose in accordance with all applicable regulations. Do not allow runoff to sewer, waterway or ground.
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	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substances, liquid, n.o.s. (Reaction of Epichlorohydrin and Bisphenol)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Label(s)	9
Packing group	III
Environmental hazards	
Marine pollutant	Yes
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Special provisions	8, 146, 335, IB3, T4, TP1, TP29
Packaging exceptions	155
Packaging non bulk	203
Packaging bulk	241

IATA	
UN number	UN3082
UN proper shipping name	Environmentally hazardous substance, liquid, n.o.s. (Reaction of Epichlorohydrin and Bisphenol)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	Yes
ERG Code	9L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.

IMDG	
UN number	UN3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Reaction of Epichlorohydrin and Bisphenol)
Transport hazard class(es)	
Class	9
Subsidiary risk	-
Packing group	III
Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-F
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 available.
General information	Read safety instructions, SDS and emergency procedures before handling.

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)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
 Delayed Hazard - No
 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)

Not regulated.

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 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

Not regulated.

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

Not listed.

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

Not listed.

US. Rhode Island RTK

Not regulated.

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)	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 24-March-2015

Revision date -
Version # 01
Further information HMIS® is a registered trade and service mark of the NPCA.
HMIS® ratings Health: 2
Flammability: 1
Physical hazard: 0

NFPA ratings



References ESIS (European chemical Substances Information System)
IARC: International Agency for Research on Cancer.
HSDB® - Hazardous Substances Data Bank

Disclaimer This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.