SAFETY DATA SHEET

This SDS complies with REACH 1907/2006 and 2001/58/EC, GHS REVISION 5, OSHA 29CFR 1910.1200

Section 1: Chemical Product and Company Identification

PRODUCT NAME: ST-1

FORMULA: Preparation/Mixture

PRODUCT USE: Non-chromated surface pretreatment

MANUFACTURER'S NAME: Pantheon Enterprises, Inc. ADDRESS: 225 West Deer Valley Road

Phoenix, AZ 85027

Safety Data Sheet Competent Person: safety@pantheonchemical.com

SUPPLIER'S NAME: Pantheon Enterprises, Inc. ADDRESS: 225 West Deer Valley Road

Phoenix, AZ 85027

TELEPHONE NUMBER: 623-780-2296 TOLL FREE: 1-888-608-7888 FAX: 623-516-0414

EMERGENCY TELEPHONE NUMBER: Chemtrec 24 hrs: 1-800-424-9300

Information: 623-780-2296 Fax: 623-516-0414

DATE PREPARED: May 7, 2015 DATE REVIEWED: June 18, 2015

Section 2: Hazards Identification

GHS Hazard Class:

Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319

GHS Label elements, including precautionary statements:

Pictogram:



Signal word: Warning

Hazard Statement(s):

H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary Statement(s):

P102 Keep out of reach of children
P103 Read label before use

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Hazard(s) Not Otherwise Classified (HNOC): Not classified

Fire and explosion: Not considered flammable or combustible.

Potential health effects: <2% of mixture consists of ingredients of unknown oral acute toxicity.

Other: None Chronic effects of overexposure: None

Appearance: Clear amber liquid

NFPA RATINGS:

COMPONENT	Health	Flammability	Reactivity	Special
	(Blue)	(Red)	(Yellow)	(White)
ST-1	1	0	0	NONE

Section 3: Composition / Information on Ingredients

PRODUCT COMPOSITION	APPROX %	CAS NO.	CANADA DSL
Water	80-95	7732-18-5	Y
DGBE (Diethylene glycol monobutyl ether)	<7	112-34-5	Y

Some items on this MSDS may be designated as trade secrets (TS). Bona fide requests for disclosure of trade secret information to medical personnel must be made in accordance with the provisions contained in 29 CFR 1910.1200 I 1-13.

Section 4: First Aid Measures

Description of First Aid Measures

INHALATION: No fumes are emitted when using this product. No adverse effects are

anticipated from inhalation.

SKIN CONTACT: Immediately flush skin with plenty of soap and water for at least 15

minutes. Remove contaminated clothing.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes.

Get medical attention if irritation persists.

INGESTION: If swallowed do not induce vomiting, give large quantities of water to

drink. Never give anything to an unconscious person. Get immediate

medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/Injuries After Inhalation: No adverse effects are anticipated from inhalation.

Symptoms/Injuries After Skin Contact: May cause mild skin irritation. Wash thoroughly with soap and rinse

with water.

Symptoms/Injuries After Eye Contact: Irritation may result from contact with the eye. Rinse immediately with

water and seek medical advice.

Symptoms/Injuries After Ingestion: May be harmful if swallowed. Drink large amount of water. Do NOT

induce vomiting. Seek medical advice.

Indication of any immediate medical attention and special treatment needed

In case of accident or if you feel unwell, seek medical advice immediately.

Section 5: Fire-fighting Measures

Suitable extinguishing media Material does not burn. Use extinguishing agent suitable for the type

of surrounding fire.

Special hazards arising from the substance or mixture No data available.

Protective actions fire-fightersWear standard protective equipment and self-contained breathing

apparatus for firefighting if necessary.

Further information

None.

Section 6: Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures

Wear proper personal protective equipment. Avoid breathing vapors, mist or gas.

Environmental precautions

None

Prevent further leakage or spillage if safe to do so. Prevent spills or contaminated rinse water from entering sewers or watercourses.

Methods and materials for containment and cleaning up

In case of small spills, absorb with inert materials such as earth or dry sand. Place in a chemical waste container. In case of large spills, dike the spill, if possible. Call emergency services. Absorb the chemical. Warn other workers of spill.

Reference to other Sections

For personal protection reference section 8. For disposal reference section 13.

Section 7: Handling and Storage

Precautions for safe handling

Do not store in temperatures below 32 F.

Wear proper protective equipment and avoid contact with skin, eyes, or clothing.

Wash hands after handling this product. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Follow all applicable local regulations for handling and storage.

Utilize chemical segregation from acids.

Specific uses

This product is a non-chromated surface pretreatment for preparing metal or composites for painting.

Section 8: Exposure Controls/Personal Protection

Control Parameters

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH REL	U.S. WEEL TWA	EU IOELV TWA (mg/m³)	United Kingdom WEL	Canada OEL	Mexico OEL
DGBE						10 ppm; 10 mg/m ³ ; STEL15		
						ppm, 15 mins.		

Exposure controls

VENTILATION:

RESPIRATORY PROTECTION: PROTECTIVE GLOVES: product. EYE PROTECTION: SKIN PROTECTION: WORK/HYGIENE PRACTICES: PROTECTIVE CLOTHING: OTHER EQUIPMENT: Always provide good general, mechanical room ventilation where this chemical/material is used.

No special precautions.

Wear chemical impervious gloves at all times while working with this Recommend eye protection using safety glasses or goggles.

Suitable protective clothing to prevent skin contact

Avoid contact with skin and eyes. Wash hands and face after handling.

Wear suitable protective clothing to prevent skin contact.

Make safety shower, eyewash stations, and hand washing equipment

available in the work area.

Section 9: Physical and Chemical Properties

APPEARANCE – COLOR: Clear amber PHYSICAL STATE: Liquid ODOR: None

ODOR THRESHOLD: Data Not Applicable

pH: 10.0-11.5

MELTING POINT/FREEZING POINT: 28°F (-2°C) Freezing point

INITIAL BOILING POINT AND BOILING RANGE: 219°F (104°C)

FLASH POINT: Not Applicable for product <1 (Butyl Acetate =1) **EVAPORATION RATE:** FLAMMABILITY (Solid, gas): Not Applicable for product UPPER/LOWER FLAMMABILITY OR EXPOLSIVE LIMITS: Not Applicable for product 17.3 mmHg @ 20°C VAPOR PRESSURE: 0.02 mmHg @ 20°C DGBE: VAPOR DENSITY (AIR = 1): Not Applicable for product RELATIVE DENSITY (@25°C): 0.96 to 1.04 (Water) SOLUBILITY (IES): 100% in water

OXIDIZING PROPERTIES:
Data Not Applicable
PARTITION COEFFICIENT: n-octanol/water:
Data Not Applicable
AUTO IGNITION TEMPERATURE:
Data Not Applicable
DECOMPOSITION TEMPERATURE:
Data Not Applicable
VISCOSITY:
Data Not Applicable

CORROSIVE: No

Section 10: Stability and Reactivity

STABILITY: Stable. CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acid solutions. This product will have an exothermic reaction

with strong acid solutions.

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur

Section 11: Toxicological Information

There is no toxicological information available for the product or mixture.

GHS	Toxicity Criteria	Data	Comments	Chemical
Required Criteria				Constituent
Acute Toxicity	ATE (oral)	>5,000 mg/kg		Product
	LD50 Oral Rat	5,660 mg/kg	Pure substance	DGBE
	LD50 Oral Rat	4,500 mg/kg	Pure substance	DGBE
	LD50 Dermal Rat	2,700 mg/kg	Pure substance	DGBE
Skin Corrosion/Irritation		Cat.2		Product
Serious Eye Damage /		Cat.2A		Product
Eye Irritation				
		Cat.2A	Pure substance	DGBE
Respiratory or Skin		No information is available		
Sensitization				
Germ Cell Mutagenicity		No information is available		
Carcinogenicity		None listed	OSHA	
		None listed	IARC	
		None listed	NTP	
Reproductive Toxicity		None listed		
STOST Single Exposure		No information is available		
STOST – Repeated Exposure		No information is available		
Aspiration Hazard		No information is available		
Ames test		No information is available		

ATE = Acute Toxicity Estimation, STOST = Specific Target Organ Systemic Toxicity OTHER INFORMATION: Only selected Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here. See actual entry in RTECS for complete information.

Section 12: Ecological Information

	Environmental Impacts	Chemical Constituents
Toxicity:	Acute LC ₅₀ 1300000 ug/L Fresh water	DGBE
	Fish - Lepomis macrochirus – 33 to 75 minutes, 96 hours	
Bioaccumulative potential:	Log Pow = 0.3	DGBE
Persistence and degradability:	Product is biodegradable	Product
Mobility in soil:	No information is available.	
PBT and vPvB assessment:	No information is available.	
Other adverse effects:	No information is available.	

Note: Not all of the ingredients have been tested for ecotoxicity.

Section 13: Disposal Considerations

Waste from residues/unused products

Completely rinse container prior to disposal. Dispose of in accordance with Federal, state, and local regulations. Large quantities of waste may require adjustment to a neutral pH. None of the chemicals used in the product are listed as a Priority Pollutant in Appendix A to 40 CFR, Part 423—126 Priority Pollutants.

Contaminated packaging

Contaminated packaging material should be disposed of as stated above for residues and unused product.

Rinsate

Do not dispose of rinse water containing product in a sanitary sewer system or stormwater drainage system.

Section 14: Transport Information

DOT TRANSPORT:	Not Regulated	
ADR = International Ca	arriage of Dangerous Goods by Road	Not Regulated
RAIL TRANSPORT:		Not Regulated
SEA TRANSPORT:	IMDG	Not Regulated
AIR TRANSPORT:	IATA/ICAO	Not Regulated

Section 15: Regulatory Information

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

This product is in compliance with rules, regulations, and/or orders of TSCA.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA) TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the Emergency Planning and Community Right To Know Act of 1986 and 40 CFR 372. This information must be included in all SDS's that are copied and distributed for the material.

The Section 313 toxic chemicals contained in this product are: None

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 chemical(s) under the statute.

The California proposition 65 chemical(s) contained in this product are: None

STATE RIGHT-TO-KNOW TOXIC SUBSTANCE OR HAZARDOUS SUBSTANCE LIST:

Florida Toxic Substance(s):

Massachusetts's hazardous substance(s):

Pennsylvania hazardous substance code(s):

Not listed

New Jersey

Not listed

CLEAN AIR ACT AMENDMENTS (1990):

SECTION 111. VOLATILE ORGANIC COMPOUNDS

This substance is subject to be compliant with emission standard of 40CFR Part 60: NNN, RRR

SECTION 112, HAZARDOUS AIR POLLUTANTS:

This substance is listed Hazardous Air Pollutant

Glycol Ethers

CLEAN WATER ACT: None of the chemicals used in the product are listed as a Priority Pollutant in Appendix A to 40 CFR, Part 423—126 Priority Pollutants.

CANADA:

This SDS will be non-compliant 3 years after the issue date. This SDS contains all of the information required by the Controlled Products Regulations (CPR).

WHMIS-INFORMATION:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR), SOR/88-66, current to February 20, 2012. The classes of controlled products listed in the CPR, Section 32, Part IV, have been reviewed and based on Professional Judgment this product has been determined to not be WHMIS controlled.

EUROPEAN UNION:

This product has been reviewed for compliance with the following European Community Directives: REACH 1907/2006; Regulation (EC) No 1272/2008 on classification, labeling, and packaging (CLP) of substances and mixtures. None of the chemicals used in this product are on the EU's REACH SVHC (Substances of Very High Concern) chemicals list (as of June 16, 2014).

Section 16: Other Information

Revision Number: 2.0

Revision explanation Comply with GHS

Information Sources: RTECS, ECHA, REACH, OSHA 29CFR 1910.1200

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