



SAFETY DATA SHEET

Section 1. Identification

Product Name: Cyclone
Chemical Name: Mixture
Synonyms: Joint Stabilizing Sealer

Supplier's Details: Trident
624 W. Illinois Avenue
Aurora, IL 60506
(866) 951-4293
www.tridentprotects.com

Emergency Telephone Number: CHEMTREC (800) 424-9300 (United States Only)
Chemtrec (outside USA): (703) 527-3887

Section 2. Hazards Identification

OSHA/HCS Status:

This product contains one or more chemicals considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Physical Hazards:

NA

Health Hazards:

SKIN IRRITATION - Category 3

INHALATION - Category 5

GHS Label Elements:

Hazard Pictograms: None

Signal Word: Warning

Hazard Statements:

H316 Causes mild skin irritation.

H333 May be harmful if inhaled.

Precautionary Statements:**Prevention:**

Keep out of reach of children. Use only outdoors in a well-ventilated area. Wear protective gloves, clothing, face and eye protection. Wash thoroughly after handling.

Response:

If swallowed: Call a POISON CENTER or physician if you feel unwell.

If on skin: Wash with plenty of soap and water. Get medical attention if irritation occurs. 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. Get medical attention if eye irritation persists.

If inhaled: Call a POSION CENTER or physician if you feel unwell.

In case of fire: Use water, water fog, dry chemical CO₂ or alcohol resistant foam to extinguish.

Storage:

Keep in a cool place. Do not allow to freeze.

Disposal:

Dispose of contents and container to appropriate waste site or reclaimer in accordance with all applicable laws, regulations, and product characteristics at time of disposal.

Hazards not otherwise classified:

None known.

Section 3. Composition/Information on Ingredients**Substance/Mixtures**

Mixture

Chemical Name:

NA

Other Means of Identification:

Cyclone Joint Stabilizing Sealer

CAS number/other identifiers:**CAS Number:**

Mixture

Chemical Name	Concentration	Additional Identification	Notes
2-butoxyethanol	<2.5%	CAS-No.: 111-76-2	% by weight
Proprietary Anti-Fungal Blend	<0.05%	Mixture	

This substance has workplace exposure limit(s). See Section 8.

Section 4. First Aid Measures**Description of Necessary First Aid Measures:****Inhalation:**

Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Eye Contact:

Immediately flush with plenty of water for at least 15 minutes. Remove contact lenses if easy to do and present. Get medical attention if irritation persists.

Skin Contact:

Wash thoroughly after handling. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion:

Call a physician or poison control center if you feel unwell. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

Most Important Symptoms/Effects (both acute and delayed):

May irritate and cause redness and pain.

Indication of immediate medical attention and special treatment needed (if necessary):

Hazards: Glycol Ethers: Some glycol ethers cause adverse effects in animals that include the reproductive system, offspring, blood, kidney and liver.

Treatment: Treat symptomatically.

Section 5. Firefighting Measures

General Fire Hazards: Not applicable.

Extinguishing Media:

Suitable Extinguishing Media: Water. Water fog. Dry chemical. Carbon Dioxide. Alcohol resistant foam.

Unsuitable Extinguishing Media: None known.

Hazardous Thermal Decomposition: None known.

Special hazards arising from the substance or mixture:

None known.

Advice for Firefighters:**Special firefighting procedures:**

Use water spray to keep fire-exposed containers cool.

Special Protective Equipment for Firefighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear appropriate personal protective equipment.

Environmental Precautions:

Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large spillages: Flush spill area with water spray. Prevent runoff from entering drains, sewers or streams. Dike for later disposal.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

Section 7. Handling and Storage

Precautions for Safe Handling:

Avoid breathing mist or vapors. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Minimize exposure to air. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Do not allow to evaporate to near dryness. Do not distill to near dryness. Addition of water or appropriate reducing materials will lessen peroxide formation.

Conditions for Safe Storage, Including any Incompatibilities:

Keep container tightly closed and in a well-ventilated place. Store away from heat. Do not allow to freeze.

Storage stability:

Shelf life, use within: 24 months

Section 8. Exposure Controls/Personal Protection

Control Parameters:

Occupational Exposure Limits:

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical Name	Type	Exposure Limit Values	Source
<i>2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve</i>	TWA	20 ppm	US. ACGIH Threshold Limit Values (01 2010)
	PEL	50 PPM 240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Biological Limit Values:

Chemical Name	Exposure Limit Values	Source
<i>2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve</i>	20 mg/g (Creatinine in urine)	ACGIH BEL (01 2010)

Exposure Controls:

Appropriate Engineering Controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual Protection Measures, Such As Personal Protective Equipment:

General Information:

Eye bath. Washing facilities. Safety shower.

Eye/Face Protection:

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin Protection:

Hand Protection:

Wear chemical-resistant gloves, footwear and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Other:

No data available.

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. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Hygiene Measures:

Observe good industrial hygiene practices.

Environmental Controls:

No data available.

Section 9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties:

Appearance:

Physical State:	Liquid
Form:	Liquid
Color:	White milky liquid

Odor: Mild

Odor Threshold: ND

pH: 7-9

Freezing Point: 0° C

Boiling Point: 100° C

Flash Point: NA

Evaporation Rate: NA

Flammability (solid, gas): NA

Flammability – Upper (%)-: NA

Flammability – Lower (%)-: NA

Vapor Pressure: 17mm@ 68°F (20°C) estimated

Vapor Density (air=1): No data available

Specific Gravity: 1.0 – 1.05 (20°C)

Solubility:

Solubility in Water: Miscible

Solubility (other): No data available

Partition coefficient

(n-octanol/water): No data available

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Dynamic Viscosity: No data available

Kinematic Viscosity: No data available

Explosive Properties: No data available

Oxidizing Properties: Not classified

Section 10. Stability and Reactivity

Reactivity: None known
Chemical Stability: Stable
Possibility of Hazardous Reactions: None known
Conditions to Avoid: Heat, sparks, flames

Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: Carbon Dioxide
Carbon Monoxide

Section 11. Toxicological Information

Information on Likely Routes of Exposure:

Inhalation: May be harmful if inhaled.
Ingestion: May be harmful if swallowed.
Skin Contact: May cause skin irritation.
Eye Contact: May cause eye irritation.

Information on Toxicological Effects:

Acute Toxicity:

Oral

Product: Oral LD-50: (Rat): 1,300 mg/kg (*2-butoxyethanol*)
Oral LD-50: (Guinea Pig): 1,400 mg/kg (*2-butoxyethanol*)

Dermal

Product: Dermal LD-50: (Rat): > 2,000 mg/kg (*2-butoxyethanol*)
Dermal LD-50: (Guinea Pig): > 2,000 mg/kg (*2-butoxyethanol*)

Inhalation

Product: Vapour: LC50 (Rat, 3 h): > 4.9 mg/l (*2-butoxyethanol*)
Vapour: LC0 (Guinea Pig, 1 h): > 3.4 mg/l (*2-butoxyethanol*)

Repeated Dose Toxicity

Product: LOAEL (Rat, Oral Study): 69 mg/kg (Target Organ(s): Liver) (*2-butoxyethanol*)
NOAEL (Rat, Dermal Study): 150 mg/kg (*2-butoxyethanol*)
LOAEC (Rat, Inhalation Study): 152 mg/m³ (Target Organ(s): Blood) (*2-butoxyethanol*)

Skin Corrosion/Irritation

Product: (Rabbit, 24 h): moderate (*2-butoxyethanol*)

Serious Eye Damage/Eye Irritation

Product: (Rabbit, 24 h): moderate (*2-butoxyethanol*)

Respiratory or Skin Sensitization

Product: Skin Sensitization: (Guinea Pig) – Not a skin sensitizer.

Mutagenicity:

In Vitro

Product: Salmonella typhimurium assay (Ames test): negative +/- activation.

In Vivo

Product: Chromosomal aberration intraperitoneal injection (Mouse, Male): Negative.

Carcinogenicity

Product: Based on available data the classification criteria are not met. Not classified as hazardous.

Reproductive Toxicity

Product: Based on available data the classification criteria are not met. Not classified as hazardous.

Specific Target Organ Toxicity – Single Exposure

Product: Not classified.

Specific Target Organ Toxicity – Repeated Exposure

Product: Not classified.

Aspiration Hazard

Product: Droplets of the product aspirated into the lungs through ingestion or vomiting may be harmful.

Other Adverse Effects

No data available.

Section 12. Ecological Information

Toxicity:

Acute Toxicity:

Fish

Product: LC-50 (Oncorhynchus mykiss, 96h): 1,474 mg/l (*2-butoxyethanol*)

Aquatic Invertebrates

Product: EC-50 (Water Flea, 48 h): 1,550 mg/l (*2-butoxyethanol*)

Chronic Toxicity:

Fish

Product: NOEC (Zebra Fish, 21 d): > 100 mg/l (*2-butoxyethanol*)

Aquatic Invertebrates

Product: NOEC (daphnid, 21 d): 100 mg/l (*2-butoxyethanol*)

Toxicity to Aquatic Plants

Product: EC-50 (Algae (*Pseudokirchneriella subcapitata*, 72 h): 1,840 mg/l (*2-butoxyethanol*)

Persistence and Degradability:

Biodegradation

Product: Material is expected to be readily biodegradable.

Biological Oxygen Demand

Product: No data available.

Specified Substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve No data available.

Chemical Oxygen Demand

Product: No data available.

Specified Substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether butyl cellosolve No data available.

BOD/COD Ratio

Product: No data available.

Specified Substance(s)

2-butoxyethanol; ethylene glycol monobutyl ether; butyl cellosolve

No data available.

Bio accumulative Potential

Product: Potential to bio accumulate low.

Mobility in Soil:

Expected to partition to water.

Results of PBT and vPvB

Assessment: Not fulfilling PBT (persistent/bio accumulative/toxic) criteria. Not fulfilling vPvB (very persistent, very bio accumulative) criteria.

Section 13. Disposal Considerations

Waste Treatment Methods:

General Information: No data available.

Disposal Methods: Dispose of waste and residues in accordance with local authority requirements. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

Section 14. Transport Information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and description. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT:

Not regulated.

Possible Shipping Description(s):

Not regulated.

IMDG-International Maritime Dangerous Goods Code:

Class not regulated.

Possible Shipping Description(s):

Not regulated.

IATA:

Class not regulated.

Possible Shipping Description(s):

Not regulated.

Section 15. Regulatory Information

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: Controlled

SARA 311/312 Hazard Classifications:

Immediate (acute) health hazard.

Delayed (chronic) health hazard.

US EPCRA (SARA Title III) Section 313 – Toxic Chemical List:

2-BUTOXYETHANOL (ETHYLENE GLYCOL MONOBUTYL ETHER) (GLYCOL ETHER CATEGORY)

California Proposition 65:

Warning: This product can expose you to diuron, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

OSHA: Hazardous

Components of this product are reported in the following inventories:

TCSA (US toxic Substances Control Act) All components of this product are listed or otherwise comply.

AICS/NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed or otherwise comply.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All components of this product are listed or otherwise comply.

AICS/NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed or otherwise comply.

MITI (Japanese Handbook of Existing and New Chemical Substances): All components of this product are listed or otherwise comply.

ECL (Korean Toxic Substances Control Act): All components of this product are listed or otherwise comply.

Philippines Inventory (PICCS): All components of this product are listed or otherwise comply.

Inventory of Existing Chemical Substances in China: All components of this product are listed or otherwise comply.

Section 16. Other Information

Revision Information: Not relevant.

Key Literature References and Sources for Data: No data available.

Training Information: No data available.

Date of Issue/Date of Revision: 6/1/20

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