Safety Data Sheet

Conforms to OSHA CFR 29 1910.1200 and aligns to the United Nations Globally Harmonized System
Conforms to The United Nations Regulation Globally Harmonized System
Date of Revision: 04/24/2024
Revision: 02

Section 1 - Chemical Product and Company Identification

Product Name: Ethanol Shield
1.2 Synonym: Blend
1.3 B3C Fuel Solutions LLC, 108 Daytona Street, Conway, SC 29526, 843-347-0482
1.4 Recommended Use: Fuel system treatment

1.5 RESTRICTIONS ON USE: THIS STABILIZER IS FOR GASOLINE ENGINES ONLY

1.6 Emergency Response Number: INFOTRAC 800-535-5053

International Emergency Telephone Number: +1-352-323-3500

Section 2 - Hazards Identification

2.1 GHS HAZARD

Hazard Classes	Hazard Categories
Flammable liquid	Category 4
Eye Irritation	Category 2A
Skin Irritation	Category 2
Specific Target Organs single exposure	Category 3
Acute Toxicity (Oral)	Category 4
Acute Toxicity (Inhalation)	Category 4
Acute Toxicity (Dermal)	Category 3
Mutagenicity	Category 1B
Carcinogen	Category 1B
Aspiration Hazard	Category 1
Aquatic Chronic	Category 2

2.2 Signal Word: Danger

2.3 ***Pictograms:***

Health Toxic Irritant Aquatic Hazard

2.4 Hazard Statements

PHYSICAL HAZARDS:	**H227: Combustible liquid**
HEALTH HAZARDS:	**H302: Harmful if swallowed** **H304: May be fatal if swallowed and enter the airway** **H315: Causes skin irritation** **H311: Toxic in contact with skin** **H319: Causes serious eye irritation** **H332: Harnful if inhaled** **H335: May cause respiratory irritation** **H340: May cause genetic defects** **H350: May cause cancer**
ENVIRONMENTAL HAZARDS:	**H411: Toxic to aquatic life with long-lasting effects**
PRECAUTIONARY STATEMENTS:	**P102: Keep out of reach of children** **P201: Obtain special instructions before use. READ SDS BEFORE USE** **P202: Do not handle until all safety precautions have been read and understood** **P210: Keep away from flames and hot services. No smoking** **P260: Do not breathe mist** **P264: Wash hands thoroughly after handling** **P270: Do not eat, drink, or smoke when using this product** **P271: Use only outdoors or in a well-ventilated area** **P273: Avoid release to the environment** **P280: Wear protective gloves, clothing, and eye protection**
RESPONSE STATEMENTS:	**P301 +P310+ P331: IF SWALLOWED: Immediately call the National POISON CENTER at 800-222-1222. DO NOT induce vomiting** **P303+P361+353: IF ON SKIN or hair. Rinse skin with water.**

P304+P340: IF INHALED. Remove to fresh air and keep comfortable for breathing
P305+P351: IF IN EYES, rinse cautiously with water for at least 15 minutes
P308+P313: If exposed or concerned, get medical attention.
P312: the National POISON CENTER at 800-222-1222 if you feel unwell.
P313+P332: If skin irritation occurs, get medical attention.
P313 +P337: If eye irritation persists, get medical attention
H314: Get medical attention if you feel unwell
P330: Rinse mouth
P362+P364: IF ON CLOTHING, take off contaminated clothing and wash it before reuse
P370: In case of fire, use foam, carbon dioxide, and dry chemical to extinguish a fire

STORAGE STATEMENTS: **P403+P405+P235: Store in a well-ventilated place, store locked up, and keep cool**

DISPOSAL STATEMENTS: **P501: Dispose of content or container following local, regional, national, or international regulations**

2.5 Hazards not otherwise classified (HNOC) or not covered by GHS: Repeated exposure may cause skin dryness or cracking

Section 3 - Composition / Information on Ingredients

3.1

CAS#	EC#	Chemical Names	Percent	Classification
N/A	N/A	A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	100%	Not classified

3.2 Blend Contains

Chemical Names	Index No.	CAS#	EC/List#	Classification
3-Oxa-1-heptanol		111-76-2	203-905-0	Acute Tox. 4 H302, Acute Tox. 3 H311 Skin Irrit. 2 H315, Eye Irrit 2, H319, Acute Tox. 4 H332
Glycerides, mixed decanoyl, and octanoyl		73398-61-5	277-452-2	Eye Irrit 2 H319
BHT		128-37-0	204-881-4	Aquatic Chronic 3 H412
Benzotriazole		95-14-7	202-394-1	Acute Tox. 4 H302, Eye Irrit 2, H319, Aquatic Chronic 2 H411
2-dimethylaminoethanol		108-01-0	203-542-8	Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314. Acute Tox. 4 H332
1,2,4-trimethylbenzene		95-63-6	202-436-9	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Eye Irrit 2, H319, STOT SE 3 H335, Acute Tox. 4 H332, Aquatic Chronic 2 H411
Mesitylene		108-67-8	203-604-4	Flam. Liq. 3 H226, Skin Irrit. 2 H315, STOT SE 3 H335, Aquatic Chronic 2 H411
Xylol		1330-20-7	203-625-9	Flam. Liq. 3 H226, Acute Tox 4 dermal H312, Skin Irrit. 2 H315, Eye Irrit 2, H319, Acute Tox 4 Inhalation
2-Phenylpropane		98-82-8	202-704-5	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H335, Aquatic Chronic 2 H411
1,2,3-trimethylbenzene		526-73-8	208-394-8	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Eye Irrit 2, H319

3.3 Trade Secret Provision and Chemical Concentration Disclosure: Following OSHA and GHS Regulations, we have withheld specific percentages of the chemicals in this mixture. The chemical concentrations have been disclosed as a blend and applied to the hazards identified in this Safety Data Sheet.

Section 4 - First Aid Measures

4.1 Eye: Contact with the eyes can cause serious irritation. Symptoms may include discomfort, pain, and redness. Severe overexposure can result in swelling of the conjunctiva and tissue damage.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

4.2 Skin: Prolonged and repeated liquid contact can defatt and dry the skin, leading to irritation and dermatitis.

Skin: Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

4.3 Ingestion: Liquid ingestion can cause inebriation, headache, gastrointestinal pain, nausea, and vomiting, leading to central nervous system depression. Aspiration of liquid into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonia, pulmonary edema, and even death.

Ingestion: Do NOT induce vomiting. Get medical aid immediately.

4.4 Inhalation: Prolonged breathing of high vapor concentrations can produce headache, dizziness, nausea, and impaired vision. Excessive overexposure can cause central nervous system depression, loss of consciousness, liver damage, and death resulting from respiratory failure.

Inhalation: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult and **IF TRAINED**, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation without protection.

4.5 ***After first aid, get appropriate paramedic or community medical support.*** The severity of the outcome following exposure may be more related to the time between the exposure and treatment rather than the amount of the exposure. Therefore, there is a need for rapid treatment of any exposure.

4.6 Note to Physicians: If you determine that a medical emergency exists and the specific chemical identity is necessary for emergency or first-aid treatment, we will immediately disclose the specific chemical identity. Call INFOTRAC 800-535-5053 or +1-352-323-3500. We will require a written statement of need and confidentiality agreement per OSHA's Trade Secret Regulations as soon as circumstances permit. We will disclose the specific chemical percentages in non-emergency situations upon written request.

Section 5 - Fire-Fighting Measures

5.1 General Fire Hazards: Use water to cool containers exposed to fire.

5.2 Hazardous Combustion Products: Avoid the fumes of burning products.

5.3 Extinguishing Media: Carbon dioxide, dry chemical, foam.

5.4 Fire Fighting Equipment/Instructions: Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing and avoid inhaling combustion products.

Section 6 - Accidental Release Measures

6.1 Spill /Leak Procedures: Ventilate area. Wear adequate protective equipment. Spillages of liquid products will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition away from the spill.

6.2 Spills: Avoid direct contact with the material. Stop the leak if necessary. Move containers from the spill area. Prevent entry into sewers or waterways. Contain and collect spillage with non-combustible, absorbent material such as sand, earth, vermiculite, or diatomaceous earth and place it in a container for disposal.

Section 7 - Handling and Storage

7.1 Handling Precautions: Avoid ignition sources such as heat, sparks, and open flames. NO SMOKING Take precautionary measures against static discharge. Non-sparking tools should be used. Wear protective gloves, clothing, and eye protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment. Empty containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other ignition sources. They may explode and cause injury or death.

7.2 Storage Requirements: Store tightly closed containers in original manufacture containers in a cool, dry, well-ventilated area.

7.3 Chemical Incompatibilities: Strong oxidizing agents and strong reducing agents.

Section 8 - Exposure Controls / Personal Protection

8.1

Chemical Names	ACGIH- TLV	OSHA - PEL
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, corrosive and modified glycol ether	25 ppm	50 ppm

8.2

ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value.
OSHA = US Occupational Safety and Health Administration. PEL = Permissible Exposure Limits.
NOTE: TWA Means "TWA is the employee's average airborne exposure in any 8-hour work shift of a 40-hour work week which shall not be exceeded."

8.3 Ventilation: Provide a general or local exhaust ventilation system to maintain airborne concentrations below TLV/PELs. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

8.4 Contaminated Equipment: Separate contaminated work clothes from street clothes and launder before reuse. Remove this material from your shoes and clean personal protective equipment.

8.5 Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected before use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use. Select gloves tested to the **ANSI/ISEA 105-2011** or European EN374 Standard.
Full contact: Viton
Splash contact: Viton
Registered trademark of The Chemours Company FC, LLC.

Eye protection
Face shield and safety glasses: Use eye protection equipment tested and approved under appropriate government standards, such as NIOSH (US) or EN 166(EU).

Skin and body protection
Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

8.6 Protective Clothing Pictograms

Section 9 - Physical and Chemical Properties

9.1

Physical State: Liquid
Appearance: Various
Odor: Characteristic order
Vapor Pressure: Not Available
Vapor Density (Air=1): >1
Specific Gravity (H2O=1,): 0.75
Relative Density: Not Available
Odor Threshold: Not Available
Flammability (solid, gas): Not applicable.
Evaporation rate: Not Available
Partition coefficient octanol/water: Not Available
pH: None

Water Solubility: Insoluble in water
Flash Point: 143.6°F (62°C) c.c.
Boiling Point/Range: 275-410°F (135-210°C)
Lower Explosive Limits (vol % in air): 1%
Upper Explosive Limits (vol % in air): 10%
Melting Point: Not Available
Viscosity: 2.03cSt @104°F, 40°C
Autoignition Temperature: Not Available
Decomposition temperature: Not Available

Section 10 - Stability and Reactivity

0.1 Stability: Stable under ordinary conditions of use and storage.

10.2 Polymerization: Hazardous polymerization has not been reported.

10.3 Chemical Incompatibilities: Strong oxidizing agents and Perchloric acid.

10.4 Hazardous Decomposition Products: Peroxides

10.5 Conditions to Avoid: Temperatures above 62ºC, heat, sparks, open flames, and other ignition sources.

Section 11- Toxicological Information

11.1

Product Name	Results	Species	Dose	Exposure
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	Oral LD50	Rat	554.9 mg/kg	None Listed
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	Inhalation LC50	Rat	*3.358mg/l	None Listed
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	Dermal LC50	Rabbit	524.9 mg/kg	None Listed

***Inhalation mist**

11.1.1 OECD Guideline Test results found in the European Chemical Agency Database show that components of this product cause Oral Toxicity.

11.11.2 OECD Guideline Test results in the European Chemical Agency Database show that the mist of this product's components causes Inhalation Toxicity.

11.11.3 OECD Guideline Test results found in the European Chemical Agency Database show that components of this product cause Dermal Toxicity.

11.2 Route of Entry: Inhalation**,** Ingestion, Absorption, Skin and Eye Contact

11.3 Aspiration Hazard: The European Chemical Agency Database shows that components of this product may be fatal if swallowed and enter the airways.

11.4 Mutagenicity: OECD Guideline Test results found in the European Chemical Agency Database show that components of this product cause genetic defects.

11.5 Skin Corrosion/Irritation: OECD Guideline Test results found in the European Chemical Agency Database show that this product's components cause skin irritation. Repeated exposure may cause skin dryness or cracking.

11.6 Serious Eye Damage/Irritation: OECD Guideline Test results found in the European Chemical Agency Data Base show that components of this product cause serious eye irritation.

11.7 Reproductive toxicity: OECD Guideline Test results found in the European Chemical Agency Data Base show no components of this product to cause damage to fertility or the unborn child.

11.8 Skin Sensitisation OECD Guideline Test results found in the European Chemical Agency Data Base show that this product contains no components that cause skin sensitivity.

11.9 Respiratory Sensitisation OECD Guideline Tests results found in the European Chemical Agency Data Base show no components of this product to cause respiratory sensitivity.

11.10 Specific Target Organ Toxicity (Single Exposure): The European Chemical Agency Data Base shows that components of this product may damage the upper respiratory tract.

11.11 Specific Target Organ Toxicity (Repeated Exposure): This product contains material that may damage the following organs: Human exposure above 200 ppm can be expected to cause narcosis, damage to the kidney and liver, and an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, and leukocytosis. It would also likely cause fragility of erythrocytes and hematuria.

11.12 Signs and Symptoms: Effects due to exposure may include Headache, Dizziness, Drowsiness, Metabolic Acidosis, Coma, and Seizures. Swallowing results in a sour taste that turns into a burning sensation and is followed by tongue numbness, indicating paralysis of the sensory nerve endings. Central nervous system depression, headache, narcosis. Symptoms may be delayed.

11.13 Carcinogenicity: OECD Guideline Test results in the European Chemical Agency Database show that this product's components cause cancer.

Chemical Name	IARC	ACGIH	NTP	OSHA
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	Not classified as carcinogenicity to humans	Confirmed animal with unknown relevance to humans	Not listed	Not Listed

Section 12 - Ecological Information

12.1

Product Name	Results	Species	Exposure
A blend of alkoxylate alcohol, alkoxylate cresol, saturated fatty acid, anti-corrosive, and modified glycol ether	Expected to be toxic to aquatic organisms. May cause long-term adverse effects on the environment		

Toxicity: OECD Guideline Test results found in the European Chemical Agency Data Base show that components of this product to harmful and can cause long-term toxicity to aquatic life.

12.2 Mobility: Floats on water

12.3 Persistence/degradability: Inconclusive technical data.

12.4 Bioaccumulation: Inconclusive technical data.

12.5 Other adverse effects: Inconclusive technical data.

Section 13 - Disposal Considerations

13.1 Disposal: DO NOT REUSE EMPTY CONTAINER! The container should be completely emptied before being discarded. Containers with residues should be considered to be hazardous wastes. Contact a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations.

Section 14 - Transport Information

14.1 DOT Transport Information

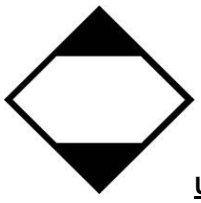
ID No.: UN 2810
Shipping Name: Toxic, liquids, organic, n.o.s.(3-Oxa-1-heptanol)
Hazard Class:6.1
Packing Group: III
Label: Toxic
Placard: Toxic

14.2 IMDG Transport Information

ID No.: UN 2810
Shipping Name: TOXIC, LIQUIDS, ORGANIC, NOS (3-Oxa-1-heptanol)
Hazard Class: 6.1
Packing Group: III
Flash Point: None
EmS Number: F-A, S-A
Label: Toxic
Placard: Toxic

14.3 UN Transport Information

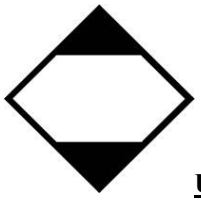
ID No.: UN 2810
Shipping Name: Toxic, liquids, organic, n.o.s.(3-Oxa-1-heptanol)
Hazard Class:6.1
Packing Group: III
Label: Toxic
Placard: Toxic



Use marking when shipping as a consumer commodity ground in the US

14.4 DOT Transport Limited Quantity/Consumer Commodity

Inner packaging is not over
5.0L (1.3 gallons) net capacity each.
Outer Package not over 30kg (66lbs) each



Use marking when shipping as a limited quantity by vessel.

14.5 IMDG Transport Limited Quantity

Inner packaging is not over
5.0L (1.3 gallons) net capacity each.
Outer Package not over 30kg (66lbs) each
Shipping Name: TOXIC, LIQUIDS, ORGANIC, NOS (3-Oxa-1-heptanol) LTD.QTY.
Hazard Class: 6.1
Packing Group: III
Flash Point: None
EmS Number: F-A, S-A

Section 15 - Regulatory Information

15.1 US Regulations:

TSCA: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Toxic Release Inventory (TRI): This product contains the following EPCRA section 313 chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know- Act of 1986 (40 CFR 372):

CAS Number	Chemical Name	Chemical percentage by weight not exceeding
1330-20-7	Xylol,	At demines% limits
98-82-8	2-Phenylpropane	At demines% limits
95-63-6	1,2,4-trimethylbenzene	At demines% limits

This information must be included in all SDSs copied and distributed for this material.

CERCLA Hazardous Substances and corresponding RQs: Xylol 100 lbs., 2-Phenylpropane 5000 lbs.

SARA Community Right-to-Know Program: All components of this blend.

Clean Water Act: None

Clean Air Act: None

OSHA: All ingredients are listed in 1910.1200

State Regulations
California prop. 65:

WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov."

Chemicals on the following State Right to Know Lists:
Massachusetts: All components of this product are on the Massachusetts Inventory or are exempt from Inventory requirements.

New Jersey: All components of this product are on the New Jersey inventory or are exempt from Inventory requirements.

Pennsylvania: All components of this product are on the Pennsylvania Inventory or are exempt from Inventory requirements.

15.2 International Regulations:
Australian Inventory of Chemical Substances: All components of this product are on the Inventory or are exempt from Inventory requirements.

National Existing Chemical Inventory in Taiwan: All components of this product) are on Inventory or are exempt from Inventory requirements.

Philippine Inventory of Chemicals and Chemical Substances All components of this product are on the Inventory or are exempt from Inventory requirements.

China Existing Chemical Inventory: All components of this product are on the Inventory or are exempt from Inventory requirements.

Section 16 - Other Information

16.1 Disclaimer: The information presented in this Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. HOWEVER, NO responsibility is assumed for any damage or injury resulting from abnormal use or failure to adhere to recommended practices. The information provided above is furnished on the condition that the person receiving them shall determine the product's suitability for their particular purpose and that they assume the risk of its use.

16.2 References: The European Chemical Agency Database and MSDS and SDS of chemicals in this mixture.

16.3 SJC Compliance Education Inc. (SJC) did not test, certify, or approve the substance described in this SDS, and all information in this SDS was provided by B3C Fuel Solutions LLC or was reproduced from publicly available regulatory data sources and product SDSs. SJC makes no representations or warranties regarding the completeness or accuracy of the information in this SDS and disclaims all liability concerning the use of this information or the substance described in this SDS.

16.4 SDS Preparation Date 03/22/2019
SDS Previous Issue Date: None
SDS Preparation Date 07/20/2019 Revise sections 2,11
SDS Preparation Date 04/24/2024 Revise sections 2,9,16

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END OF SAFETY DATA SHEET