SAFETY DATA SHEET

Revision: 12/06/2024

Product Name:

1.

MFA Oil Company



PRODUCT AND COMPANY IDENTIFICATION ICE EATER

Company Name:	MFA Oil Company	
	Columbia, MO 65201 USA	
Web Site Address:	www.mfaoil.com	Phone Number: (800) 827-0116
Emergency Contact:	CHEMTREC	24 Hour Emergency Number: (800) 424-9300
Recommended Use:	Fuel additive	
2. HAZARDS IDE	ENTIFICATION	
Classification of the Substance or Mixture:	Flammable Liquids: Category 2 Skin Corrosion/Irritation: Category 2 Serious Eye Damage/Eye Irritation: Specific Target Organ Toxicity (Singl nervous system: Category 3	Category 1 le Exposure)[respiratory tract irritation, central
Label Elements:		
Signal Word:	Danger	
Pictogram:		
GHS Hazard Phrases:	H225: Highly flammable liquid and v H315: Causes skin irritation. H318: Causes serious eye damage. H335: May cause respiratory irritatic H336: May cause drowsiness or diz:	vapor. on. ziness.
GHS Precaution Phrases:	 P210: Keep away from heat, hot sur sources. No smoking. P233: Keep container tightly closed. P240: Ground and bond container a P241: Use explosion proof electrical P242: Use only non-sparking tools. P243: Take precautionary measures P261: Avoid breathing dust/fume/ga P264 + 265: Wash hands and exposeyes. P271: Use only outdoors or in a well P280: Wear protective gloves/protection 	face, sparks, open flames, and other ignition ind receiving equipment. I, ventilating, lighting equipment. s against static discharge. i/mist/vapors/spray. sed skin thoroughly after handling. Do not touch I-ventilated area. ctive clothing/eye protection/face protection.
GHS Response Phrases:	P302 + 352: IF ON SKIN: Wash wit P303 + 361 + 353: IF ON SKIN (or F clothing. Rinse SKIN with water or sf P304 + 340 + 319: IF INHALED: R for breathing. Get medical help if you P305 + 354 + 338 + 317: IF IN E minutes. Remove contacts if present	h plenty of water or shower. hair): Take off immediately all contaminated hower. emove person to fresh air and keep comfortable a feel unwell. EYES: Immediately rinse with water for several and easy to do. Continue rinsing. Get emergency

	 medical help. P321: For specific treatment, see section 4 of this SDS. P333 + 317: If skin irritation or rash occurs: Get medical help. P362 + 364: Take off contaminated clothing and wash it before reuse. P370 + 378: In case of fire: Use alcohol-resistant foam, carbon dioxide (CO2), or dry chemical to extinguish.
GHS Storage and Disposal Phrases:	 P403 + 235: Store in a well-ventilated place. Keep cool. P405: Store locked up. P501: Dispose of contents and container in accordance with local, regional, national, and international regulations.
Hazards Not Otherwise Specified:	Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

3. COMPOSITION / INFORMATION / INGREDIENTS

CAS Number	Hazardous Components (Chemical Name)	Concentration*
Trade Secret	Proprietary ester	1 - 5 %
71-36-3	Butan-1-ol	10- 30 %
67-63-0	Isopropyl alcohol	45 - 70 %

*The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

4. FIRST AID MEASURES

In Case of Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
In Case of Skin Contact:	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs, get medical advice or attention. Wash contaminated clothing before reuse.
In Case of Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical attention immediately.
In Case of Ingestion:	Rinse mouth. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical advice or attention if you feel unwell.
Most Important Symptoms and Effects, Both Acute and Delayed:	May cause drowsiness or dizziness, headache, nausea, vomiting, and severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage, including blindness could result. May cause respiratory irritation. Skin irritation may include redness and pain.
Indication of Immediate Medical Attention and Special Treatment Needed:	Provide general supportive measures and treat symptomatically. For thermal burns, flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to the hospital. Keep victim warm. Keep victim under observation as symptoms may be delayed.
General Information:	Take off contaminated clothing immediately. If you feel unwell, seek medical advice (show this SDS or package label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. FIREFIGHTING MEASURES

Flash Point:	64 °F (18 °C)
Explosive Limits:	Not determined
Autoignition Temperature:	Not determined
Suitable Extinguishing Media:	Use alcohol-resistant foam, carbon dioxide (CO2), or dry chemical.
Unsuitable Extinguishing Media:	Do not use water jet as this will spread the fire.

Specific Hazards Arising from the Chemical:	Vapors form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce the potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. Static electricity accumulation may be significantly increased in the presence of small quantities of water or other contaminants. Material will float and may ignite on the surface of water. During fire, gases hazardous to health may be formed.
Specific Hazards During Firefighting:	Do not allow run-off from firefighting to enter drains or water courses.
Hazardous Combustion Products:	Carbon oxides, formaldehyde, corrosive vapors, and nitrogen oxides (NO _x).
Further Information:	In case of a fire and/or explosion, do not breathe fumes. Move containers from fire area if you can do so without risk. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of a fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
Special Protective Equipment for Firefighters:	Wear a self-contained breathing apparatus and full protective clothing must be worn in case of a fire. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Protective Precautions, Protective Equipment and Emergency Procedures:	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Transfer by mechanical means such as vacuum truck to a salvage tank or other suitable container for recovery or safe disposal. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see Section 8 of this SDS.
Environmental Precautions:	Avoid discharge into drains, water courses, or onto the ground. Use appropriate containment to avoid environmental contamination.
Steps to be Taken in Case Material is Released or Spilled: Eliminate all ignition sources (no smoking, flares, sparks, or flames in in Keep combustibles (wood, paper, oi, etc.) away from spilled precautionary measures against static discharge. Use only non-spa product is soluble in water.	
	where this is possible. Use a non-combustible material like vermiculite, sand, or earth to soak up the product and place in a container for later disposal. Following product recovery, flush area with water.
	Small spills: Absorb with earth, sand, or no-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (i.e., cloth, fleece). Clean surface thoroughly to remove residual contamination.
	Never return spills to their original containers for reuse. For waste disposal, see Section 13 of this SDS.

7. HANDLING AND STORAGE

Precautions to be Taken in	Do not handle, store, or open near an open flame, sources of heat, or sources of
Handling:	ignition. Protect material from direct sunlight. Explosion-proof general and local
	exhaust ventilation should be used. Minimize fire risks from flammable and
	combustible materials (including combustible dust and static accumulating liquids) or
	dangerous reactions with incompatible materials. Handling operations that can
	promote accumulation of static charges include but are not limited to mixing, filtering,
	pumping at high flow rates, splash filling, creating mists or sprays, tank and container
	filling, tank cleaning, sampling, gauging, switch loading, and vacuum truck operations.
	Take precautionary measures against static discharges. All equipment used when

	handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not get this material in contact with eyes. Do not taste or swallow. Avoid breathing mists/vapors. Avoid contact with eyes, skin, and clothing. When using, do not eat, drink, or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. For additional information on equipment bonding and grounding, refer to the Canadian Electrical Code in Canada, (CSA C22.1), or the American Petroleum Institute (API) Recommended Practice 2003, "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" or National Fire Protection Association (NFPA) 77, "Recommended Practice on Static Electricity" or National Fire Protection Association (NFPA) 70, "National Electrical Code".
Precautions to be Taken in Storing:	Store locked up. Keep away from heat, sparks, and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate all sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in a tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of this SDS).
General Handling Information:	Do not spray on a naked flame or any incandescent material. Take necessary action to avoid static discharge (which might cause ignition of organic vapors). Use only explosion-proof equipment. Keep away from open flames, hot surfaces, and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines:

CAS No.	Ingredient	Source	Value
Trade Secret	Proprietary ester	OSHA	TWA: 5 mg/m ³
		ACGIH	TWA: 5 mg/m ³ STEL: 10 mg/m ³
		NIOSH	TWA: 10 mg/m ³
71-36-3	Butan-1-ol	OSHA	PEL: 100 ppm (300 mg/m ³)
		ACGIH	TWA: 20 ppm
		NIOSH	REL: 50 ppm (150 mg/m ³)
67-63-0	Isopropyl alcohol	OSHA	TWA: 400 ppm (980 mg/m ³) STEL: 500 ppm (1225 mg/m ³)
		ACGIH	TWA: 200 ppm STEL: 400 ppm
		NIOSH	TWA: 400 ppm (980 mg/m ³) STEL: 500 ppm (1225 mg/m ³)
Protection: Protection:	exposure limits (where exposure limits have n Follow OSHA respirato approved respirator. Pro to any hazardous chem there is any potential fo other circumstance w protection. Wear safety glasses wit Wear appropriate cher clothing. Use of an im protective clothing, whe	applicable ot been es or regulation otection pro- ical is limite or uncontro here air p h side shie nical resist pervious a n necessai	and alloome concentrations below recommended e) or to an acceptable level (in countries where stablished, an approved respirator must be worn. ons (29 CFR 1910.134) and use NIOSH/MSHA ovided by air purifying respirators against exposure ed. Use a positive pressure air supplied respirator if lled release, exposure levels are unknown, or any purifying respirators may not provide adequate lds (or goggles) and a face shield. tant gloves. Wear appropriate chemical resistant pron is recommended. Wear appropriate thermal y.
ineering Contro ntilation etc.): eral Hygiene siderations:	Is Use explosion-proof ge should be used. Ventila process enclosures, loc airborne levels below re established, maintain ai and safety shower. When using, do not sm industrial hygiene meas eating, drinking, and/o	 Use explosion-proof general and local exhaust ventilation. Good general ventilation 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. Provide eyewash station and safety shower. When using, do not smoke. Keep away from food and drink. Always observe good industrial hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective 	
	CAS No. Trade Secret 71-36-3 67-63-0 piratory Equipmediate piratory Equipmediate pira	CAS No.IngredientTrade SecretProprietary ester71-36-3Butan-1-ol67-63-0Isopropyl alcohol67-63-0Isopropyl alcoholpiratory Equipment ecify Type):If engineering controls of exposure limits (where exposure limits have n Follow OSHA respirator. Pro- to any hazardous chem there is any potential for other circumstance will protection.Protection:Wear safety glasses with m protection.Protection:Wear appropriate cher clothing. Use of an im protective clothing, whe use should be used. Ventila process enclosures, loca airborne levels below re established, maintain ai and safety shower.meral Hygiene isiderations:When using, do not sm industrial hygiene meas eating, drinking, and/or	CAS No.IngredientSourceTrade SecretProprietary esterOSHAACGIHNIOSH71-36-3Butan-1-olOSHA67-63-0Isopropyl alcoholOSHA67-63-0Isopropyl alcoholOSHAacify Type):If engineering controls do not mair exposure limits (where applicable exposure limits have not been es Follow OSHA respirator regulation approved respirator. Protection pro- to any hazardous chemical is limite there is any potential for uncontro other circumstance where air p protection.Protection:Wear safety glasses with side shie ulter eis clothing. Use of an impervious a protective clothing, when necessar uirborne levels below recommende established, maintain airborne level and safety shower.meral Hygiene isiderations:When using, do not smoke. Keep industrial hygiene measures, such eating, drinking, and/or smoking

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Liquid
Appearance:	Clear, very light yellow
Odor:	Not determined
Odor Threshold:	Not determined
Melting Point:	Not determined
Boiling Point:	> 73 °F (> 23 °C) - Calculated
Autoignition Point:	Not determined
Flash Point:	64 °F (18 °C)
Explosive Limits:	Not determined
Upper / Lower Flammability:	
Lower Flammability Limit:	Not determined
Upper Flammability Limit:	Not determined
Specific Gravity (Water = 1):	0.803
Vapor Pressure (vs. Air or mm Hg):	Not determined
Vapor Density (vs. Air = 1):	Not determined
Relative Density:	0.801 g/mL (6.69 lbs/gal)
Evaporation Rate:	Not determined
Solubility in Water:	Not determined
pH:	Not determined
Percent Volatile:	Not determined
Partition Coefficient (n-octanol / water):	Not determined
Decomposition Temperature:	Not determined
Viscosity @ 40 °C (104 °F):	2.10 cSt

10. STABILITY AND REACTIVITY

Reactivity:	The product is stable and non-reactive under normal conditions of use, storage, and transport.
Stability:	Material is stable under normal conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur. Vapors may form explosive mixtures with air.
Conditions to Avoid:	Avoid heat, sparks, open flames, and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible Materials:	Strong oxidizing agents. Alkaline metals. Strong acids. Aldehydes. Rubber. Oils. Plastics. Amines. Halogenated compounds. Peroxides. Trong bases.
Hazardous Decomposition Products:	Carbon oxides and sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	Not classified based on available data.
Skin Corrosion / Irritation:	Causes skin irritation.
Serious Eye Damage / Eye Irritation:	Causes serious eye damage.
Respiratory / Skin Sensitization:	Not classified based on available data.
Germ Cell Mutagenicity:	Not classified based on available data.
Carcinogenicity:	Not classified based on available data.
Reproductive Toxicity:	Not classified based on available data.
STOT - Single Exposure:	May cause respiratory tract irritation. May cause drowsiness or dizziness.
STOT - Repeated Exposure:	Not classified based on available data.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.		
Persistence and Degradability:	No data is available on the degradability of this product.		
Bioaccumulative Potential:	No data is available		
Mobility in Soil:	No data is available		
Other Adverse Effects:	No data is available		

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:

Dispose of this material and its container to a hazardous or special waste collection point. Dispose of contents and container in accordance with local, regional, national, and international regulations. Empty containers or liners may contain some product residues. Follow all label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO / IATA
UN Number	UN1993	UN1993	UN1993
UN Proper Shipping	Flammable liquid, N.O.S.	Flammable liquid, N.O.S.	Flammable liquid, N.O.S.
Name	(Contains isopropanol)	(Contains isopropanol)	(Contains isopropanol)
Transport Hazard	DOT Hazard Class: 3	IMDG: 3	Air Class: 3
Class(es)		Sub Class:	
Packing Group	11	11	11
		Marine Pollutant: No	

15. REGULATORY INFORMATION

US Federal Regulations: This produ

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated

CERCLA Hazardous Substances List (40 CFR 302.4): Butan-1-ol (CAS 71-36-3) Listed.

CERCLA Reportable Quantity: this material does not contain any components with a CERCLA RQ.

SARA 304 Emergency Release Notification: Not listed

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053): Not listed

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely Hazardous Substance: Not listed

SARA 311/312 Hazardous Chemical: See Section 2 of this SDS for the GHS hazard classifications associated with this product.

SARA 313 (TRI Reporting):

Chemical name	CAS number	% by weight
Butan-1-ol	71-36-3	10 - 30

Isopropyl alcohol	67-63-0	45- 70

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants List: Not regulated

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Not regulated

Safe Drinking Water Act (SDWA): Listed

FEMA Priority Respiratory Health and Safety in the Flavor of Manufacturing Workplace:

Butan-1-ol (CAS 71-36-3) Low priority Isopropyl alcohol (CAS 67-63-0) Low priority



Proposition 65 Label Warning

WARNING: This product will not expose you to chemicals that are known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information go to <u>www.P65Warnings.ca.gov</u>.

16. OTHER INFORMATION

Revision Date: Previous Revisions: 12/06/2024 – Initial Release Not Applicable

Hazard Rating System:



Company Policy or Disclaimer:

The information on this SDS is based on data which is considered to be accurate. MidContinental Chemical Company, however, makes no guarantees or warranty, either expressed or implied of the accuracy or completeness of this information.

The conditions or methods of handling, storage, use and disposal of the products are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of this product.

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