

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous

Products Regulation (February 11, 2015).

Revision Date: 06/06/2019 Date of Issue: 10/12/2018 Supersedes Date: 05/17/2019 Version: 2.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Winter Tech -50°F/-46°C Anti-Freeze

Product Code: 311XX

Intended Use of the Product

Anti-freeze

Name, Address, and Telephone of the Responsible Party

Company

Star brite® Inc.

4041 SW 47th Avenue

Fort Lauderdale, FL 33314

(954) 587-6280

www.starbrite.com

Emergency Telephone Number

Emergency Number : US: (800) 424-9300; International: (703) 527-3887 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS-US/CA Classification

Flam. Liq. 3 H226

Full text of hazard classes and H-statements: see section 16

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)



Signal Word (GHS-US/CA) : Warning

Hazard Statements (GHS-US/CA) : H226 - Flammable liquid and vapour.

Precautionary Statements (GHS-US/CA): P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating, and lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take action to prevent static discharges.

P280 - Wear protective gloves, protective clothing, and eye protection.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P501 - Dispose of contents/container in accordance with local, regional, national,

territorial, provincial, and international regulations.

Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Ethyl alcohol	(CAS-No.) 64-17-5	10 - 30**	Flam. Liq. 2, H225
			Eye Irrit. 2A, H319
tert-Butyl alcohol	(CAS-No.) 75-65-0	0.015	Flam. Liq. 2, H225
			Acute Tox. 4 (Inhalation:vapor), H332
			Eye Irrit. 2A, H319
			STOT SE 3, H336
			STOT SE 3, H335

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

Skin Contact: Immediately drench affected area with water for at least 15 minutes. Immediately remove contaminated clothing. Obtain medical attention if irritation develops or persists.

Eye Contact: Immediately rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

Most Important Symptoms and Effects Both Acute and Delayed

General: Not expected to present a significant hazard under anticipated conditions of normal use.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Prolonged exposure may cause skin irritation.

Eye Contact: Prolonged exposure may cause slight irritation to eyes.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂). Water may be ineffective but water should be used to keep fire-exposed container cool.

Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid. Water may be ineffective because it may not cool the material below its flash point; however, water should be used to keep fire-exposed container cool.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Flammable liquid and vapor.

Explosion Hazard: May form flammable or explosive vapor-air mixture. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors.

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion. Hazardous reactions may occur on contact with certain chemicals. Refer to incompatible materials.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion. Do not breathe fumes from fires or vapors from decomposition.

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^{*}Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

^{**} The actual concentration of ingredient(s) is withheld as a trade secret in accordance with the Hazardous Products Regulations (HPR) SOR/2015-17 and 29 CFR 1910.1200.

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Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. **Hazardous Combustion Products:** Carbon oxides (CO, CO₂). Nitrogen oxides. Hydrocarbons. Formaldehyde. Acrolein. Isobutylene.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray). Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Eliminate all ignition sources. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

Precautions for Safe Handling: Avoid contact with skin, eyes and clothing. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapors, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

Storage Conditions: Store in a dry, cool place. Store in a well-ventilated place. Keep container tightly closed. Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Keep in fireproof place.

Incompatible Materials: Strong acids, strong bases, strong oxidizers. Isocyanates. Strong mineral acids. Dehydrating agents. Aluminum (at high temperatures).

Specific End Use(s)

Anti-freeze

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Ethyl alcohol (64-17-5)		
USA ACGIH	ACGIH STEL (ppm)	1000 ppm
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans

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		cording To The Hazardous Products Regulation (February 11, 2015).
USA OSHA	OSHA PEL (TWA) (mg/m³)	1900 mg/m³
USA OSHA	OSHA PEL (TWA) (ppm)	1000 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1900 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	1000 ppm
USA IDLH	US IDLH (ppm)	3300 ppm (10% LEL)
Alberta	OEL TWA (mg/m³)	1880 mg/m³
Alberta	OEL TWA (ppm)	1000 ppm
British Columbia	OEL STEL (ppm)	1000 ppm
Manitoba	OEL STEL (ppm)	1000 ppm
New Brunswick	OEL TWA (mg/m³)	1880 mg/m³
New Brunswick	OEL TWA (ppm)	1000 ppm
Newfoundland & Labrador	OEL STEL (ppm)	1000 ppm
Nova Scotia	OEL STEL (ppm)	1000 ppm
Nunavut	OEL STEL (ppm)	1250 ppm
Nunavut	OEL TWA (ppm)	1000 ppm
Northwest Territories	OEL STEL (ppm)	1250 ppm
Northwest Territories	OEL TWA (ppm)	1000 ppm
Ontario	OEL STEL (ppm)	1000 ppm
Prince Edward Island	OEL STEL (ppm)	1000 ppm
Québec	VEMP (mg/m³)	1880 mg/m³
Québec	VEMP (ppm)	1000 ppm
Saskatchewan	OEL STEL (ppm)	1250 ppm
Saskatchewan	OEL TWA (ppm)	1000 ppm
Yukon	OEL STEL (mg/m³)	1900 mg/m³
Yukon	OEL STEL (ppm)	1000 ppm
Yukon	OEL TWA (mg/m³)	1900 mg/m³
Yukon	OEL TWA (ppm)	1000 ppm
tert-Butyl alcohol (75-65-0)	- 11:1: /	
USA ACGIH	ACGIH TWA (ppm)	100 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA OSHA	OSHA PEL (TWA) (mg/m³)	300 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (TWA) (mg/m³)	300 mg/m³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	, , , , ,	100 ppiii
	I NIOSH REL (STEL) (mg/m³)	450 mg/m^3
LUSA NIOSH	NIOSH REL (STEL) (mg/m³)	450 mg/m³
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA IDLH	NIOSH REL (STEL) (ppm) US IDLH (ppm)	150 ppm 1600 ppm
USA IDLH Alberta	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³)	150 ppm 1600 ppm 303 mg/m³
USA IDLH Alberta Alberta	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm
USA IDLH Alberta Alberta British Columbia	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 303 mg/m³
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (mg/m³)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 303 mg/m³ 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 303 mg/m³ 100 ppm 300 mg/m³ 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador Nova Scotia	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 100 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador Nova Scotia Nunavut	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 100 ppm 303 mg/m³ 100 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador Nova Scotia Nunavut Nunavut Northwest Territories	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (mg/m³) OEL TWA (ppm) OEL STEL (ppm) OEL STEL (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 303 mg/m³ 100 ppm 100 ppm 100 ppm 100 ppm 100 ppm 100 ppm 125 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador Nova Scotia Nunavut Nunavut Northwest Territories Northwest Territories	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL STEL (ppm) OEL STEL (ppm) OEL TWA (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 303 mg/m³ 100 ppm 125 ppm 100 ppm
USA IDLH Alberta Alberta British Columbia Manitoba New Brunswick New Brunswick Newfoundland & Labrador Nova Scotia Nunavut Nunavut Northwest Territories	NIOSH REL (STEL) (ppm) US IDLH (ppm) OEL TWA (mg/m³) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (ppm) OEL TWA (mg/m³) OEL TWA (mg/m³) OEL TWA (ppm) OEL STEL (ppm) OEL STEL (ppm)	150 ppm 1600 ppm 303 mg/m³ 100 ppm 100 ppm 303 mg/m³ 100 ppm

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Québec	VEMP (mg/m³)	303 mg/m³	
Québec	VEMP (ppm)	100 ppm	
Saskatchewan	OEL STEL (ppm)	125 ppm	
Saskatchewan	OEL TWA (ppm)	100 ppm	
Yukon	OEL STEL (mg/m³)	450 mg/m³	
Yukon	OEL STEL (ppm)	150 ppm	
Yukon	OEL TWA (mg/m³)	300 mg/m³	
Yukon	OEL TWA (ppm)	100 ppm	

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.



Viscosity







Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State Liquid Pink **Appearance** Odor Alcohol **Odor Threshold** Not available

рН 7.5

Evaporation Rate Not available **Melting Point** Not available **Freezing Point** Not available **Boiling Point** Not available **Flash Point** 41 °C (105.8 °F) **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not applicable **Lower Flammable Limit** Not available Not available **Upper Flammable Limit Vapor Pressure** Not available Relative Vapor Density at 20°C Not available **Relative Density** Not available 0 98

Specific Gravity Solubility Water: Soluble **Partition Coefficient: N-Octanol/Water** Not available Not available

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SECTION 10: STABILITY AND REACTIVITY

<u>Reactivity</u>: Reacts violently with strong oxidizers. Increased risk of fire or explosion. Hazardous reactions may occur on contact with certain chemicals. Refer to incompatible materials.

Chemical Stability: Flammable liquid and vapor. May form flammable or explosive vapor-air mixture.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

<u>Conditions to Avoid</u>: Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

<u>Incompatible Materials</u>: Strong acids, strong bases, strong oxidizers. Isocyanates. Strong mineral acids. Dehydrating agents.

Aluminum (at high temperatures).

<u>Hazardous Decomposition Products</u>: Thermal decomposition generates: Carbon oxides (CO, CO₂). Hydrocarbons. Irritating fumes. Aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified
Acute Toxicity (Dermal): Not classified
Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available Skin Corrosion/Irritation: Not classified

pH: 7.5

Eye Damage/Irritation: Not classified

pH: 7.5

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation. **Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: Prolonged exposure may cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Ethyl alcohol (64-17-5)	
LD50 Oral Rat	10470 mg/kg
LD50 Dermal Rat	20 ml/kg
LC50 Inhalation Rat	124.7 mg/l/4h
tert-Butyl alcohol (75-65-0)	
LD50 Oral Rat	2200 mg/kg
LD50 Dermal Rabbit	> 2 g/kg
LC50 Inhalation Rat	> 10000 ppm/4h
ATE US/CA (vapors)	11.00 mg/l/4h
Ethyl alcohol (64-17-5)	
IARC Group	1
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.
tert-Butyl alcohol (75-65-0)	
National Toxicology Program (NTP) Status Evidence of Carcinogenicity.	

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Not classified.

Ethyl alcohol (64-17-5)	
LC50 Fish 1	11200 mg/l
EC50 Daphnia 1	9268 - 14221 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 Fish 2	> 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
ErC50 (algae)	1000 mg/l
NOEC Chronic Crustacea	9.6 mg/l
tert-Butyl alcohol (75-65-0)	
LC50 Fish 1	6130 - 6700 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	933 mg/l (Exposure time: 48 h - Species: Daphnia magna)
EC50 Daphnia 2	4607 - 6577 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

Persistence and Degradability

Blend RVAF -50 (2/2/15)	
Persistence and Degradability	Not established.

Bioaccumulative Potential

bloaceantalative i otential	
Blend RVAF -50 (2/2/15)	
Bioaccumulative Potential	Not established.
Ethyl alcohol (64-17-5)	
Log Pow	-0.32
tert-Butyl alcohol (75-65-0)	
BCF Fish 1	1.09
Log Pow	0.35

Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In Accordance with DOT

This product is exempt from Regulated as a Dangerous Goods as an aqueous solution containing less than 24% alcohol and greater than 50% water. 49 CFR 173.150(e)(2)

In Accordance with IMDG

This product is exempt from Regulated as a Dangerous Goods as an aqueous solution containing less than 24% alcohol. IMDG Code SP 144

In Accordance with IATA

This product is exempt from Regulated as a Dangerous Goods as an aqueous solution containing less than 24% alcohol. IATA DGR SP A58

In Accordance with TDG

This product is exempt from Regulated as a Dangerous Goods as an aqueous solution of alcohol with a flashpoint > 23 °C, containing less than 50% alcohol and greater than 50% substances not considered dangerous goods, and contained in a small means of containment [small container (≤450L)]. TDG 1.36(b)

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SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Blend RVAF -50 (2/2/15)		
SARA Section 311/312 Hazard Classes Physical hazard - Flammable (gases, aerosols, liquids, or solids)		
Ethyl alcohol (64-17-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
tert-Butyl alcohol (75-65-0)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Subject to reporting requirements of United States SARA Section 313		
SARA Section 313 - Emission Reporting 1 %		

US State Regulations

Ethyl alcohol (64-17-5)

- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Illinois Toxic Air Contaminant Carcinogens
- U.S. Maine Chemicals of Concern
- U.S. Massachusetts Allowable Ambient Limits (AALs)
- U.S. Massachusetts Allowable Threshold Concentrations (ATCs)
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- RTK U.S. Massachusetts Right To Know List
- U.S. Massachusetts Threshold Effects Exposure Limits (TELs)
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Chemicals of High Concern
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New York Occupational Exposure Limits TWAs
- U.S. North Dakota Air Pollutants Guideline Concentrations 1-Hour
- U.S. Oregon Permissible Exposure Limits TWAs
- RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas City of Austin Aerosol Paint and Glue Restrictions
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

tert-Butyl alcohol (75-65-0)

- U.S. California Toxic Air Contaminant List (AB 1807, AB 2728)
- U.S. Connecticut Hazardous Air Pollutants HLVs (30 min)
- U.S. Connecticut Hazardous Air Pollutants HLVs (8 hr)
- U.S. Delaware Pollutant Discharge Requirements Reportable Quantities
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Acceptable Ambient Concentrations
- U.S. Idaho Non-Carcinogenic Toxic Air Pollutants Emission Levels (ELs)
- U.S. Idaho Occupational Exposure Limits TWAs
- U.S. Massachusetts Drinking Water Guidelines

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Groundwater Reportable Concentration Reporting Category 2
- U.S. Massachusetts Oil & Hazardous Material List Reportable Quantity
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 1
- U.S. Massachusetts Oil & Hazardous Material List Soil Reportable Concentration Reporting Category 2
- RTK U.S. Massachusetts Right To Know List
- U.S. Massachusetts Toxics Use Reduction Act
- U.S. Michigan Occupational Exposure Limits STELs
- U.S. Michigan Occupational Exposure Limits TWAs
- U.S. Minnesota Hazardous Substance List
- U.S. Minnesota Permissible Exposure Limits STELs
- U.S. Minnesota Permissible Exposure Limits TWAs
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) 24-Hour
- U.S. New Hampshire Regulated Toxic Air Pollutants Ambient Air Levels (AALs) Annual
- U.S. New Jersey Discharge Prevention List of Hazardous Substances
- U.S. New Jersey Environmental Hazardous Substances List
- RTK U.S. New Jersey Right to Know Hazardous Substance List
- U.S. New Jersey Special Health Hazards Substances List
- U.S. New Jersey Water Quality Ground Water Quality Criteria
- U.S. New Jersey Water Quality Practical Quantitation Levels (PQLs)
- U.S. New York Occupational Exposure Limits TWAs
- U.S. North Dakota Air Pollutants Guideline Concentrations 8-Hour
- U.S. Oregon Permissible Exposure Limits TWAs
- U.S. California Safer Consumer Products Initial List of Candidate Chemicals and Chemical Groups
- RTK U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- RTK U.S. Pennsylvania RTK (Right to Know) List
- U.S. Tennessee Occupational Exposure Limits STELs
- U.S. Tennessee Occupational Exposure Limits TWAs
- U.S. Texas Effects Screening Levels Long Term
- U.S. Texas Effects Screening Levels Short Term
- U.S. Vermont Permissible Exposure Limits STELs
- U.S. Vermont Permissible Exposure Limits TWAs
- U.S. Washington Permissible Exposure Limits STELs
- U.S. Washington Permissible Exposure Limits TWAs

Canadian Regulations

Ethyl alcohol (64-17-5)

Listed on the Canadian DSL (Domestic Substances List)

tert-Butyl alcohol (75-65-0)

Listed on the Canadian DSL (Domestic Substances List)

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest

Revision

: 06/06/2019

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:vapor)	Acute toxicity (inhalation:vapor) Category 4
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor

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H226	Flammable liquid and vapor
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness

NFPA Health Hazard : 1 - Materials that, under emergency conditions, can cause

significant irritation.

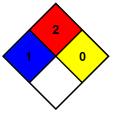
NFPA Fire Hazard : 2 - Materials that must be moderately heated or exposed

to relatively high ambient temperatures before ignition can

occur.

NFPA Reactivity Hazard : 0 - Material that in themselves are normally stable, even

under fire conditions.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

NA GHS SDS 2015 (Can, US, Mex)

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