



Startron Enzyme Fuel Treatment - Super Concentrate - Gas

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: 08/06/2018

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Version: 3.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: Startron Enzyme Fuel Treatment - Super Concentrate - Gas

Product Code: 145XX

Intended Use of the Product

Use Of The Substance/Mixture: Fuel Additive

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. 4 H227

Asp. Tox. 1 H304

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

Label Elements

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)

:



GHS08

Signal Word (GHS-US/CA)

: Danger

Hazard Statements (GHS-US/CA)

: H227 - Combustible liquid.

H304 - May be fatal if swallowed and enters airways.

Precautionary Statements (GHS-US/CA) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P331 - Do NOT induce vomiting.

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

P403 - Store in a well-ventilated place.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Other Hazards

Aquatic Acute 3 H402

Aquatic Chronic 3 H412

H402 - Harmful to aquatic life.

H412 - Harmful to aquatic life with long lasting effects.

P273 - Avoid release to the environment.

This material or its emissions may defat skin, cause contact dermatitis, or aggravate existing skin disease - may cause skin dryness or cracking. Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

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Unknown Acute Toxicity (GHS-US/CA)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
Petroleum distillates, hydrotreated light	(CAS-No.) 64742-47-8	90 - 95	Asp. Tox. 1, H304
Petroleum distillates, hydrotreated light	(CAS-No.) 64742-47-8	< 10	Flam. Liq. 3, H226 Skin Irrit. 2, H315 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Full text of H-phrases: see section 16

*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%).

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

Eye Contact: Rinse cautiously 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: Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

Most Important Symptoms and Effects Both Acute and Delayed

General: May be fatal if swallowed and enters airways.

Inhalation: Prolonged exposure may cause irritation.

Skin Contact: Repeated or prolonged skin contact may cause irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.

Eye Contact: May cause slight irritation to eyes.

Ingestion: Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury. The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

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.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Combustible liquid.

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.

Advice for Firefighters

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

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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.

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.

Other Information: This product does not sustain combustion according to ASTM D 4206. Do not allow run-off from firefighting to enter drains or water courses.

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 breathing (vapor, mist, spray). Do not get in eyes, on skin, or on clothing. 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. Avoid release to the environment.

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. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Use only non-sparking tools. 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. This product does not sustain combustion according to ASTM D 4206. Repeated or prolonged skin contact may cause dermatitis and defatting.

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

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 and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Keep in fireproof place.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Specific End Use(s)

Fuel Additive.

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.

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Petroleum distillates, hydrotreated light (64742-47-8)		
British Columbia	OEL TWA (mg/m ³)	200 mg/m ³ (application restricted to conditions in which there are negligible aerosol exposures)

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.



Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flammable 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
Appearance	: Colorless, transparent liquid
Odor	: Characteristic
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: 148 - 290 °C (298.4 - 554 °F)
Flash Point	: > 79 °C (174.2 °F) (Does not sustain combustion according to ASTM D 4206)
Auto-ignition Temperature	: 215 - 220 °C (419 - 428 °F)
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not applicable
Lower Flammable Limit	: 0.6 %
Upper Flammable Limit	: 6 %
Vapor Pressure	: 0.1 mm Hg @ 20 °C
Relative Vapor Density at 20°C	: 4.5 - 5 (air=1)
Relative Density	: Not available
Specific Gravity	: 0.795 - 0.803 @ 15 °C
Solubility	: Water: Negligible
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Viscosity, Kinematic	: 1.8 - 1.92 cSt @ 40 °C
VOC content	: 100 %

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Reacts violently with strong oxidizers. Increased risk of fire or explosion.

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

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

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

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

Eye Damage/Irritation: Not classified

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: May be fatal if swallowed and enters airways.

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

Symptoms/Injuries After Skin Contact: Repeated or prolonged skin contact may cause irritation. Repeated or prolonged skin contact may cause dermatitis and defatting.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes.

Symptoms/Injuries After Ingestion: Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury. The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Chronic Symptoms: None known.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Petroleum distillates, hydrotreated light (64742-47-8)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation Rat	> 5.2 mg/l/4h

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ecology - General: Harmful to aquatic life. Harmful to aquatic life with long lasting effects.

Petroleum distillates, hydrotreated light (64742-47-8)	
LC50 Fish 1	45 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 Fish 2	2.2 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

Persistence and Degradability

Starbrite Startron Diesel Fuel Additive	
Persistence and Degradability	May cause long-term adverse effects in the environment.

Bioaccumulative Potential

Starbrite Startron Diesel Fuel Additive	
Bioaccumulative Potential	Not established.

Petroleum distillates, hydrotreated light (64742-47-8)	
BCF Fish 1	61 - 159

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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. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

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 Not regulated for transport - Does not sustain combustion according to ASTM D 4206

Marine Pollutant: No

In Accordance with IMDG Not regulated for transport

In Accordance with IATA Not regulated for transport

In Accordance with TDG Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Starbrite Startron Diesel Fuel Additive	
SARA Section 311/312 Hazard Classes	Health hazard - Aspiration hazard Physical hazard - Flammable (gases, aerosols, liquids, or solids)
Petroleum distillates, hydrotreated light (64742-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

US State Regulations

Petroleum distillates, hydrotreated light (64742-47-8)
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. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Petroleum distillates, hydrotreated light (64742-47-8)
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 : 08/06/2018

Revision

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:

Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 2	Hazardous to the aquatic environment - Chronic Hazard Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3
Asp. Tox. 1	Aspiration hazard Category 1
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3

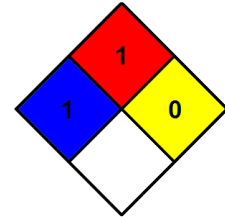
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H226	Flammable liquid and vapor
H227	Combustible liquid
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H336	May cause drowsiness or dizziness
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

- NFPA Health Hazard** : 1 - Materials that, under emergency conditions, can cause significant irritation.
- NFPA Fire Hazard** : 1 - Materials that must be preheated 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)