

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Performance Fuel Specialists
PO Box 1318
Livingston, MT 59047

Telephone (888) 737-7767 **Fax** (928) 244-6687

Product Name Arctic Plus

Recommended Use Fuel additive

Emergency Contact / Number Chemtrec / (800) 424-9300 (US, 24 hour)

SECTION 2: HAZARD IDENTIFICATION

Hazards

Flammable liquid	Category 3, Flammable liquid and vapor
Skin corrosion/irritation	Category 2, Causes skin irritation
Eye damage/irritation	Category 1, Causes serious eye damage
Acute toxicity, oral	Category 4, Harmful if swallowed
Acute toxicity, dermal	Category 4, Harmful in contact with skin
Acute toxicity, inhalation	Category 4, Harmful if inhaled
Carcinogenicity	Category 2, Suspected of causing cancer
Hazardous to the aquatic environment	
-acute	Category 2, Toxic to aquatic life
-chronic	Category 2, Toxic to aquatic life with long lasting effects



Signal Word DANGER

Precautionary Statements

Precautions

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. No smoking. Keep container tightly closed. Ground container and receiving equipment. Use explosion-proof electrical, ventilating and light equipment, etc. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves and clothing, eye and face protection. Use personal protective equipment as required. Avoid breathing fumes or mist. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Response

In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction. IF exposed or concerned: get medical advice or attention. IF SWALLOWED: Call a POISON CENTER, doctor or physician if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water or shower. If skin irritation occurs: get medical advice or attention. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing.

Storage and Disposal

Store in a well ventilated place. Keep cool. Store locked up. Dispose of contents and container to an approved waste disposal plant.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component Name	CAS#	Component Percent
Hydrosulfurized kerosene	64742-81-0	10 – 20
Solvent naphtha	Mixture	10 – 20
Trimethylbenzene	Mixture	10 – 20
Ethylene glycol monobutyl ether	111-76-2	10 – 20
2-ethylhexan-1-ol	104-76-7	5 – 10
Xylene	1330-20-7	<2
Naphthalene	91-20-3	<3

SECTION 4: FIRST AID MEASURES

Eye Contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove any contact lenses if worn. Get medical attention if irritation develops or persists.
Skin Contact	Wash skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. Wash clothing separately before reuse.
Ingestion	If swallowed, do NOT induce vomiting, but have the victim rinse mouth with water, and then drink 2 - 4 cupsful of water. Get immediate medical attention immediately. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration and contact a physician immediately. If breathing is difficult, administer oxygen and contact a physician immediately.

Most Important Symptoms / Effects

May cause eye irritation or discomfort. Prolonged or repeated skin contact may result in skin drying which may result in irritation and dermatitis. Ingested liquid can directly enter the lungs when swallowed or vomited. Serious lung damage and possibly fatal chemical pneumonia can develop if this occurs. Vapor inhalation and/or skin absorption can cause central nervous system effects, including dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death. Chronic exposures may cause hearing loss, irregular heart rhythms and potential cardiac arrest. Moderately irritating to respiratory tract.

Indication of Immediate Medical Attention and Special Treatment, If Necessary

Persistent eye or skin irritation, ingestion, difficulty in breathing, unconsciousness or respiratory distress. Activated charcoal mixture may be administered in case of ingestion. Administer 5 ml/kg or 350 ml for an average adult. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk justified by the presence of additional toxic substances. Activated charcoal may induce vomiting, but may be given after emesis or lavage to absorb toxic additives.

SECTION 5: FIREFIGHTING MEASURES

Suitable and Unsuitable Extinguishing Media

Use fire-fighting techniques such as water, CO₂ and foam. Use a water spray to cool fire-exposed containers, structures and to protect personnel.

Specific Hazards Arising from the Chemical

Vapors are heavier than air and may travel along the ground to a source of ignition (pilot light, heater, electric motor) some distance away. Containers or drums (especially when empty but containing residual fumes) can explode when heat (welding, cutting, etc.) is applied. Burning material will release smoke and fumes which should be considered toxic. Storage tanks or containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture or explosion.

Specific Protective Equipment and Precautions for Fire-Fighters

Do not enter confined fire space without full equipment and a positive pressure NIOSH-approved self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Isolate release area and keep unnecessary or untrained people away. Avoid skin or eye contact with spilled material. See Section 8 for personal protection gear.

Environmental Precautions

Contain spill if it can be done with minimal risk. Prevent liquid from entering drains, sewers or waterways. Advise EPA, state or local agencies as required.

Methods for Cleaning Up

Eliminate all sources of ignition - Heat, sparks, flame, electricity, and impact. Spills are extremely slippery and should be cleaned up immediately. Contain spilled material with dikes or absorbents. Do not allow material to enter soil, surface water, or sewer system. Treat or dispose of in accordance with all federal, state, and local requirements.

LARGE SPILLS PROCEDURE: Stop the source of the leak, if it is safe to do so. Contain spilled material. Vacuum or sweep up material and place in a disposal container. Absorb residue with inert material (e.g. dry sand or earth), then place in a chemical waste container. Do not flush to sewer. Use explosion-proof equipment during clean-up.

SMALL SPILLS PROCEDURE: Absorb spills with inert material. Transfer to a chemical waste container and dispose of properly.

SECTION 7: HANDLING AND STORAGE

Handling

Use appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Keep away from food and drinking water. Secure container after each use. Use with adequate ventilation or wear appropriate respirator when ventilation is inadequate. Do not eat, drink or smoke in areas where this material is handled, stored and processed. Wash hands and face before eating, drinking and smoking, using the restroom or at the end of shift or work assignment.

Storage

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Use appropriate containment to avoid environmental contamination.

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limits

Component Name	ACGIH	OSHA
Oil mist	5 mg/m ³	5 mg/m ³
Solvent naphtha	Not Established	100 ppm (PEL)
Ethylene glycol monobutyl ether	20 ppm (TWA)	50 ppm (PEL)
Xylene	100 ppm (TWA)	100 ppm (TWA)
Trimethylbenzene	25 ppm (TWA)	Not Established
Naphthalene	10 ppm (TWA)	10 ppm (TWA)

Engineering Controls

Use appropriate ventilation to maintain airborne concentration below exposure limits. Have eye wash stations and safety showers readily available.

Eye and Face Protection

Wear safety glasses or chemical safety goggles; use face shield if splashing is possible e.g. when pouring large amounts.

Skin Protection

Wear chemical or petroleum resistant gloves to avoid contact. Additional body garments should be used based upon the task being performed.

Respiratory Protection

Maintain good ventilation or air flow. Use a respirator in areas where the exposure is unknown or above OSHA or ACGIH limits.

General Hygiene

Follow accepted work practices for handling an flammable material. Do not eat, drink or smoke in areas where this product is used or stored. Wash thoroughly with soap and water after task or shift, when using the restroom or before eating.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Physical State	Amber liquid	Flash Point (PMCC)	125 °F
Specific Gravity (Water=1)	0.91 (7.6 lbs/gal)	Upper Flammability Limits	Not Determined
Evaporation Rate	Not Determined	Lower Flammability Limits	Not Determined
pH (as shipped/1% in water)	Not Applicable	Auto-ignition Temperature	Not Determined
Solubility in Water	Nil	Decomposition Temperature	Not Determined
Odor	Aromatic hydrocarbon	Vapor Pressure	Not Determined
Odor Threshold	Not Determined	Vapor Density (Air=1)	>1
Melting/Freezing Point	Not Determined	Partition Coefficient (n-octanol/water)	Not Determined
Boiling Range	Not Determined	Viscosity (cSt, 100 °F)	>20.5
Initial Boiling Point	Not Determined	Critical Temperature	Not Determined

Note: Physical and chemical properties are provided for safety, health and environmental considerations and do not fully represent product specifications. Those should be requested separately.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Will not react under normal temperature and storage conditions

Chemical Stability: Stable under normal temperature and storage conditions

Possibility of Hazardous Reactions: Will not occur under normal storage and use conditions

Conditions to Avoid: Static discharge, high heat, open flame, storage temperatures above 50 °C/120 °F

Incompatible Materials: Avoid contact with strong oxidizing agents, such as nitric and sulfuric acids.

Hazardous Decomposition Products: Carbon and nitrogen oxides, smoke and other possibly toxic organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

Specific toxicity tests have not been conducted on this mixture. In accordance with OSHA's Hazard Communication Standard 1910.1200, this mixture is assumed to have the same health hazards as its significant components.

Acute Toxicity Effects

Slightly irritating to the eyes and skin, effect varies by individual and with length of exposure. Ingestion can cause abdominal discomfort, nausea and diarrhea. Inhalation may cause varying symptoms including respiratory tract irritation and chemical pneumonitis depending on individual susceptibility and amount of inhalation. See Sections 2 and 4 for further information.

Chronic Toxicity Effects

Any acute effects may be aggravated. See Sections 2 and 4 for further information.

Carcinogenicity

No components are found to be carcinogens according to OSHA and NTP. Contains low amounts (<3%) of petroleum impurities that have been rated by IARC as possible or suspect human carcinogens (IARC 2B).

SECTION 12: ECOLOGICAL INFORMATION

Specific environmental tests have not been conducted on this mixture. The ratings in Section 2 are based on the published ratings of the main components.

SECTION 13: DISPOSAL CONSIDERATIONS

Do not dispose of into waste water treatment facilities. Dispose of in accordance with local, state/province, and federal environmental regulations. This material, if discarded, is considered a hazardous waste under RCRA Regulation 40 CFR 161.

SECTION 14: TRANSPORT INFORMATION

DOT Information Not Regulated (<119 gals/shipment)
NA1993, PG III, Class 3; Combustible Liquid, n.o.s. (contains fuel oil) (>119 gals/shipment)

SECTION 15: REGULATORY INFORMATION

TSCA Status All components are listed in the TSCA inventory
SARA 311/312 Reporting Categories Acute, flammable, chronic hazards
SARA 313 Reportable Ingredients Naphthalene (CAS 91-20-3), Xylene (CAS 1330-20-7), Ethylene glycol monobutyl ether (CAS 111-76-2)

SECTION 16: OTHER INFORMATION

HMIS and NFPA Ratings (Health, Fire, Physical Hazard) 2-2-0
0 = Insignificant, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Extreme

Department Issuing SDS Health and Safety