Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Gasoline Enhanced (Alcohol):
Regular Plus (Dyed or Clear)
Midgrade Plus
Premium Plus
Enhanced 89
Enhanced 90
Performance 92
Performance Plus 94
Super Premium Plus

Synonyms: CASRN 8006-61-9.

Product Use: Unleaded fuel for spark ignited engines. The product name will include "Dyed" if the product is dyed for tax purposes.

Manufacturer/Supplier: Husky Oil Marketing Company
PO Box 6525 Station 'D'
Calgary, Alberta
T2P 3G7

Phone Number: 403-298-6111

Emergency Phone: 403-262-2111

Date of Preparation: March 19, 2012

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

DANGER

EXTREMELY FLAMMABLE LIQUID AND VAPOR - VAPOR MAY CAUSE FLASH FIRE. HARMFUL OR FATAL IF SWALLOWED. CAN ENTER LUNGS AND CAUSE DAMAGE. CANCER HAZARD – CAN CAUSE CANCER. IRRITATING TO EYES.

Colour: Water white or pale yellow; may be dyed a variety of colours.

Physical State: Liquid.

Odour: Petroleum.

WHMIS	Personal Protection Equipment	TDG (Ground)
		

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.

Eye: Irritating to eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin: May be irritating to skin. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: Harmful or fatal: may cause lung damage if swallowed. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause headache, dizziness, confusion, loss of appetite and loss of consciousness. Exposure to vapour concentrations exceeding 5000 ppm may result in loss of consciousness, coma and death.

Chronic Effects: See Section 11 for more information.

Medical Conditions Aggravated By Exposure: Not available.

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Bone marrow. Liver. Kidneys. Nervous system.

Potential Environmental Effects: See Section 12 for more information.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Wt. %
Gasoline, natural	8006-61-9	60 - 100
Ethanol	64-17-5	5 - 10

Section 4: FIRST AID MEASURES

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. If signs/symptoms persist, get medical attention.

Skin Contact: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. If signs/symptoms develop, get medical attention.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Inhalation: Remove person to fresh air. If breathing has stopped apply artificial respiration. If signs/symptoms develop, get medical attention.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Flammable liquid by WHMIS criteria. Flammable liquid by OSHA criteria. Released vapours may form flammable/explosive mixtures at or above the flash point. Vapours may travel considerable distances to ignition sources and cause a flash fire. Cool containing vessels with water jet in order to prevent pressure build-up, auto-ignition or explosion.

Means of Extinction
Suitable Extinguishing Media: Dry chemical, alcohol foam, polymer foam, or carbon dioxide.
Unsuitable Extinguishing Media: Water may not be an effective medium to extinguish fire.

Products of Combustion: Oxides of carbon.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Explosion Data
Sensitivity to Mechanical Impact: This material is not sensitive to mechanical impact.
Sensitivity to Static Discharge: This material is sensitive to static discharge at temperatures above the flash point.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate all unnecessary personnel. Stay upwind. Eliminate all ignition sources. Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways.

Methods for Containment: Stop leak if without risk. Contain spill and absorb with inert absorbent. Large pools may be covered with foam to prevent vapour evolution. Do not flush to sewer or allow to enter waterways.

Methods for Clean-Up: Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material. Large spills should be removed with explosion proof vacuum equipment.

Other Information: Dispose of in accordance with all federal, provincial and local regulations. Comply with federal, provincial, and local requirements for spill and/or release notification.

Section 7: HANDLING AND STORAGE

Handling:
Do not swallow. Do not get in eyes. All equipment used when handling the product must be grounded. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking. See Section 8 for information on Personal Protective Equipment.

Storage:
Store in cool, dry, well-ventilated area away from incompatible materials, heat, and sources of ignition. All storage containers and pumping equipment should be grounded. Keep out of the reach of children.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines
Component

Gasoline, natural

(8006-61-9) **ACGIH:** 300 ppm (TWA); 500 ppm (STEL); A3 (1990); For Gasoline

(8006-61-9) **OSHA:** 300 ppm (TWA); 500 ppm (STEL) [Vacated]

Ethanol

(64-17-5) **ACGIH:** 1000 ppm (TWA); A3 (2008)

(64-17-5) **OSHA:** 1000 ppm (TWA), 1900 mg/m³ (TWA);

Benzene

(71-43-2) **ACGIH:** 0.5 ppm (TWA); 2.5 ppm (STEL); Skin; A1; BEI (1996)

(71-43-2) **OSHA:** 1 ppm (TWA); 5 ppm (STEL);

Xylenes

(1330-20-7) **ACGIH:** 100 ppm (TWA); 150 ppm (STEL); A4; BEI (1992)
(1330-20-7) **OSHA:** 100 ppm (TWA), 435 mg/m³ (TWA);
150 ppm (STEL) [Vacated]

PEL: Permissible Exposure Limit
TLV: Threshold Limit Value
TWA: Time-Weighted Average
STEL: Short-Term Exposure Limit
C: Ceiling

Engineering Controls:	Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof ventilation equipment.
Personal Protective Equipment	
Eye/Face Protection:	Wear safety glasses. Ensure that eyewash stations are close to the workstation location.
Hand Protection:	Wear impervious gloves. Neoprene or nitrile material is suggested. Consult manufacturer specifications for further information.
Skin and Body Protection:	Wear suitable protective clothing. Flame resistant clothing such as Nomex ® is recommended in areas where material is stored or handled.
Respiratory Protection:	If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator or self-contained breathing apparatus (SCBA) should be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
General Hygiene Considerations:	Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Naturally occuring water white or pale yellow; may be dyed a variety of colours for tax or other purposes.
Colour:	Water white or pale yellow; may be dyed a variety of colours.
Odour:	Petroleum.
Odour Threshold:	0.12 - 0.15 ppm recognition. 0.06 - 0.08 ppm threshold.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Melting Point:	Not available.
Boiling Point:	25 to 210 °C
Flash Point:	< -40 °C (COC)
Evaporation Rate:	> 10(n-BuAc = 1)
Lower Flammability Limit:	1.4 %
Upper Flammability Limit:	7.6 %
Vapor Pressure:	50 kPa to 110 kPa (38 °C)
Vapor Density:	3.2 (Air = 1)
Specific Gravity:	0.70 to 0.75 (Water = 1)
Density:	690 to 740 g/L (15 °C)
Solubility in Water:	Insoluble.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Near 257 °C
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability:	Stable under normal storage conditions.
Conditions of Reactivity:	Contact with incompatible materials. Sources of ignition.
Incompatible Materials:	Acids. Oxidizers. Ammonia.
Hazardous Decomposition Products:	Not available.
Possibility of Hazardous Reactions:	None known.

Section 11: TOXICOLOGICAL INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Toxicity

Component	CAS No.	LD_{50} oral	LD_{50} dermal	LC_{50}
Gasoline, natural	8006-61-9	Not available.	Not available.	300000 mg/m³, (rat), 5M
Ethanol	64-17-5	7060 mg/kg, (rat)	20000 mg/kg, (rabbit)	20000 ppm, (rat), 10H
Benzene	71-43-2	930 mg/kg, (rat)	>9400 µl/kg, (rabbit)	10000 ppm, (rat), 7H
Xylenes	1330-20-7	>1700 mg/kg, (rat)	4300 mg/kg, (rabbit)	5000 ppm, (rat), 4H

Eye: Irritating to eyes. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Ethanol may cause painful sensitization to light, chemical conjunctivitis and corneal damage.

Skin: May be irritating to skin. Signs/symptoms may include localized redness, swelling, and itching.

Ingestion: Harmful or fatal: may cause lung damage if swallowed. Swallowing the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis. May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Inhalation: May cause respiratory tract irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause headache, dizziness, confusion, loss of appetite and loss of consciousness. Exposure to vapour concentrations exceeding 5000 ppm may result in loss of consciousness, coma and death.

Skin Sensitization: Not hazardous by OSHA/WHMIS criteria.

Respiratory Sensitization: Not hazardous by OSHA/WHMIS criteria.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Skin. Eyes. Gastrointestinal tract. Respiratory system. Blood. Cardiovascular system. Bone marrow. Liver. Kidneys. Reproductive system. Nervous system.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation. Prolonged exposure to Ethanol may cause liver, kidney, and heart damage. Long term inhalation of Benzene or Xylene vapours can result in bone marrow abnormalities with damage to blood forming tissues and may cause anemia and other blood cell abnormalities. Immunodepressive effects have also been reported. Repeated exposure of the eyes to high concentrations of Xylenes vapour may cause reversible eye damage.

Carcinogenicity: Hazardous by OSHA/WHMIS criteria. May cause cancer. Long-term exposure to Gasoline vapors has caused cancer in laboratory animals. Animal studies with Ethanol have reported the development of tumours. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumour composed of cells of the type normally found in the bone marrow).

Component Carcinogenicity

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Gasoline, natural	A3	Group 2B	Not listed.	OSHA Carcinogen.	Listed.
Ethanol	A3	Not listed.	Not listed.	Not listed.	Not listed.
Benzene	A1	Group 1	List 1	OSHA Carcinogen.	Listed.
Xylenes	A4	Group 3	Not listed.	Not listed.	Not listed.

Mutagenicity: Hazardous by OSHA/WHMIS criteria. May cause heritable genetic damage. Laboratory experiments with Ethanol have resulted in mutagenic effects.

Reproductive Effects: Ethanol may cause reproductive effects.

Developmental Effects

Teratogenicity: Not hazardous by OSHA/WHMIS criteria.

Embryotoxicity: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome". Benzene and Xylene have caused adverse fetal effects in laboratory animals.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions: Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

Section 14: TRANSPORTATION INFORMATION

CFR

Proper Shipping Name: UN 1203, GASOLINE, 3, PG II

Class: 3

UN Number: 1203

Packing Group: II

Label Code:

TDG

Proper Shipping Name: UN 1203, GASOLINE, 3, PG II

Class: 3

UN Number: 1203

Packing Group: II

Label Code:

Section 15: REGULATORY INFORMATION

Chemical Inventories

US (TSCA)
The components of this product are in compliance with the chemical notification requirements of TSCA.

Canada (DSL)
The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

Federal Regulations

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Classification:
Class B2 - Flammable Liquids.
Class D2A - Carcinogenicity.
Class D2A - Mutagenicity.
Class D2B - Eye irritant.

Hazard Symbols:

United States
This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112(r) TQ (lbs.)
Gasoline, natural	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.
Ethanol	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.	Not listed.
Benzene	Not listed.	Not listed.	10	313	U019	Not listed.
Xylenes	Not listed.	Not listed.	100	313	U239	Not listed.

State Regulations

Massachusetts

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Gasoline, natural	8006-61-9	Listed.
Ethanol	64-17-5	E
Benzene	71-43-2	E
Xylenes	1330-20-7	Listed.

Note: E = Extraordinarily Hazardous Substance

New Jersey

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Gasoline, natural	8006-61-9	SHHS
Ethanol	64-17-5	SHHS
Benzene	71-43-2	SHHS
Xylenes	1330-20-7	SHHS

Note: SHHS = Special Health Hazard Substance

Pennsylvania

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Gasoline, natural	8006-61-9	Listed.
Ethanol	64-17-5	Listed.
Benzene	71-43-2	ES
Xylenes	1330-20-7	E

Note: E = Environmental Hazard; S = Special Hazardous Substance

California

California Prop 65: WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Component	Type of Toxicity
Gasoline, natural	cancer (wholly vaporized)
Benzene	developmental, male & cancer

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for his own particular use.

Expiry Date: March 18, 2015

Version: 1.0

MSDS Prepared by: **Deerfoot Consulting Inc.**

Phone: (403) 720-3700