

## SAFETY DATA SHEET

### SECTION 1 ♦ IDENTIFICATION

Explorer Pipeline Company 6120 South Yale Ave., Suite 1100 Tulsa, OK 74136	<b>FOR EMERGENCY SOURCE INFORMATION CONTACT:</b> ♦ (918) 493 - 5100	
<b>GHS PRODUCT IDENTIFIER:</b> Gasoline, Natural/Diluent, All Grades <b>EPL Code:</b> 1B	<b>CHEMICAL FAMILY:</b> Petroleum Hydrocarbon	<b>PRODUCT USES:</b> Feedstock

### SECTION 2 \* HAZARDS IDENTIFICATION

#### GHS CLASSIFICATIONS

Aspiration Hazard - Category 1	Carcinogenicity - Category 1A	Flammable Liquid - Category 1
Germ Cell Mutagenicity - Category 1B	Hazardous to the Aquatic Environment – Acute Hazard - Category 3	Skin Corrosion/Irritation - Category 2
Specific Target Organ Toxicity (Repeat Exposure) - Category 1 (liver, kidneys, bladder, blood, bone marrow, nervous system)	Specific Target Organ Toxicity (Single Exposure) - Category 3 (respiratory irritation, narcosis)	
Hazardous to the Aquatic Environment – Chronic Hazard - Category 2	Eye Damage/Irritation - Category 2B	Toxic to Reproduction - Category 1A

#### GHS LABEL ELEMENTS

#### Gasoline, Natural/Diluent

#### GHS PICTOGRAMS

#### SIGNAL WORD

				<b>DANGER</b>
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#### HAZARD STATEMENTS

Causes damage to organs (liver, kidneys, bladder, blood, bone marrow, nervous system) through prolonged or repeated exposure.	May be fatal if swallowed and enters airways.
Causes skin irritation.	Harmful to aquatic life.
May damage fertility or the unborn child.	Extremely flammable liquid and vapor.
May cause genetic defects.	May cause drowsiness or dizziness.
May cause respiratory irritation.	May cause cancer.

#### PRECAUTIONARY STATEMENTS

#### *Prevention*

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

*Response*

In case of fire: Use foam, dry chemical. Use water spray to cool adjacent tanks and structures. Do not spray water directly on fire.

IF exposed or concerned: Get medical advice/attention.

IF ON SKIN (or hair): Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison control center or doctor/physician if you feel unwell.

Get medical advice/attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do not induce vomiting.

*Storage*

Store in a well-ventilated place

Keep cool

Keep container tightly closed

*Disposal*

Dispose of contents/container in accordance with local/regional/national/international regulations.

**SUPPLIER INFORMATION**

Explorer Pipeline Company

6120 South Yale Ave., Suite 1100

Tulsa, Oklahoma 74136

**SECTION 3 ▼ COMPOSITION/INFORMATION OF INGREDIENTS**

INGREDIENT	CAS NUMBER	PERCENTAGE (%)	
n-Pentane	Isopentane	109-66-0 / 78-78-4	25 - 65
n-Butane	Isobutane	75-28-5 / 106-97-8	1 - 55
C6 Hydrocarbons	-----	-----	1 - 30
C7 Hydrocarbons	-----	-----	1 - 12
C8 Hydrocarbons	-----	-----	1 - 3
Benzene	71-43-2	-----	0 - 2

**SECTION 4 + FIRST AID MEASURES**

**EYES:** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower lids, Get Medical Aid.

**SKIN:** Quickly remove contaminated clothing and immediately flush skin with plenty of soap and water while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

**INGESTION:** Do not induce vomiting. Call a physician and/or transport to an emergency facility immediately.

**INHALATION:** Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give cardiopulmonary resuscitation. If breathing is difficult, give medical oxygen.

NOTE TO PHYSICIAN: TREAT SYMPTOMATICALLY AND SUPPORTIVELY

**SECTION 5 ⌘ FIRE-FIGHTING MEASURES**

SEE SECTION 9 FOR FLAMMABILITY PROPERTIES

**EXTREMELY FLAMMABLE!** This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, these vapors can burn in the open or explode in confined spaces. Being heavier than air, flammable vapors may travel long distances along the ground before reaching a point of ignition and flashing back.

**SUITABLE EXTINGUISHING MEDIA:** Water fog, dry chemical, foam, or Carbon Dioxide. Use water spray to cool nearby containers and structure exposed to fire. Water fog or spray are of value in cooling tanks and containers but may not achieve extinguishment.

**HAZARDOUS REACTIONS/DECOMPOSITION:** Burning or excessive heating may produce carbon monoxide and carbon dioxide, also other harmful gases/vapors including oxides and/or other compounds of chlorine, manganese, and bromine.

**SPECIAL PROTECTIVE ACTIONS FOR FIREFIGHTERS:** For fires involving this material, do not enter any enclosed or confined space without proper protective equipment. This may include self-contained breathing apparatus to protect against the hazardous effects of combustion products and oxygen deficiencies. If firefighters cannot work upwind of the fire, respiratory protective equipment must be worn. Cool tanks and containers exposed to fire with water. Burning liquid will float on water. Notify appropriate authorities if liquid enters sewer/waterways.

**SECTION 6 ❖ ACCIDENTAL RELEASE MEASURES**

<b>PERSONAL PRECAUTIONS</b>	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Evacuate personnel to safe areas. Use personal protective equipment. All equipment used when handling the product must be grounded. Ensure adequate ventilation. Take precautionary measures against static discharges. Keep people away from and upwind of spill/leak. Stop leak if you can do so without risk.
<b>METHODS FOR CONTAINMENT</b>	A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Dike far ahead of liquid spill for later disposal.
<b>METHODS FOR CLEANING UP</b>	Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.
<b>OTHER INFORMATION</b>	Water spray may reduce vapor but may not prevent ignition in closed spaces.

**SECTION 7 ✂ HANDLING AND STORAGE**

Prior to working with this product workers should be trained on its proper handling and storage

<b>PRECAUTIONS FOR SAFETY HANDLING</b>	<ul style="list-style-type: none"> <li>➤ Do not siphon by mouth.</li> <li>➤ Handle as a flammable liquid.</li> <li>➤ Keep away from heat, sparks, and open flame! Electrical equipment should be approved for classified area. Bond and ground containers during product transfer to reduce the possibility of static-initiated fire or explosion.</li> <li>➤ Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API Publication 2003, "Protection Against Ignitions Arising Out of Static, Lightning and Stray Currents."</li> </ul>
<b>STORAGE PROCEDURES</b>	<ul style="list-style-type: none"> <li>➤ Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers.</li> <li>➤ Keep containers closed and clearly labeled. Empty product containers or vessels may contain explosive vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.</li> <li>➤ Store in a well-ventilated area. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code".</li> <li>➤ Avoid storage near incompatible materials.</li> </ul>
<b>INCOMPATIBILITIES</b>	<ul style="list-style-type: none"> <li>➤ Keep away from strong oxidizers.</li> </ul>

**SECTION 8 # EXPOSURE CONTROLS / PERSONAL PROTECTION**

**EXPOSURE LIMITS**

Chemical Name	ACGIH TLV (2019)	OSHA PEL	NIOSH IDLH
n-Pentane	TWA: 600 ppm	TWA: 1,000	120 ppm (REL) 1,500 ppm
Butane	TWA: None STEL: 1,000 ppm	TWA: None	800 ppm (REL)
Benzene	TWA: 0.5 ppm STEL: 2.5 ppm <i>Skin</i>	TWA: 1 ppm STEL: 5	500 ppm

**ENGINEERING CONTROLS:** Use adequate ventilation to keep vapor concentrations of this product below occupational exposure limits and flammability limits, particularly in confined areas.

**PERSONAL PROTECTIVE EQUIPMENT**

- **EYES:** Eye protection (ANSI Z87.1 approved) should be worn whenever there is a likelihood of misting or splashing/spraying liquid. Suitable eyewash station should be available. Contact lenses must not be worn.
- **SKIN/BODY:** Chemical protective clothing is recommended based on a thorough PPE hazard assessment. Note: The resistance of specific material may vary from product to product as well as with degree of exposure. Consult manufacturer specifications for specific information.
- **HAND PROTECTION:** Gloves constructed of nitrile, neoprene, or PVC are recommended. Consult manufacturer specifications for specific information.
- **RESPIRATORY PROTECTION:** A NIOSH approved air purifying respirator (APR) with properly selected cartridges may be permissible under certain circumstances where airborne concentrations may exceed exposure limits. Protection provided by APRs is limited, calculate the maximum use concentration for the exposure situation. Use a positive pressure air supplied (Grade D) respirator if there is any potential for an uncontrolled release, exposure levels are not known or any other circumstances where APRs may not provide adequate protection.
- **OTHER HYGIENIC AND WORK PRACTICES:** Use good personal hygiene practices. In case of skin contact, wash with mild soap and water or a waterless hand cleaner. Immediately remove soaked clothing and wash thoroughly before reuse.

**SECTION 9 ↩ PHYSICAL AND CHEMICAL PROPERTIES**

<b>BOILING POINT (760 MM HG):</b> 84 °F/29 °C	<b>PERCENT VOLATILE BY VOLUME:</b> Slight - 100%
<b>SPECIFIC GRAVITY (H<sub>2</sub>O = 1):</b> 0.6-0.7	<b>VISCOSITY UNITS, TEMP:</b> Unavailable
<b>EVAPORATION RATE (BuAc = 1):</b> Unavailable	<b>VAPOR DENSITY (AIR =1):</b> >1
<b>VAPOR PRESSURE AT 25°C:</b> 510 - 760 mm Hg	<b>SOLUBILITY IN WATER:</b> Negligible
<b>APPEARANCE AND ODOR:</b> Clear colorless liquid, with hydrocarbon odor.	
<b>FLASH POINT:</b> (Method Used) -70 °F/-57 °C	<b>FLAMMABLE LIMITS:</b> LEL: 1.4% UEL: 7.6%
<b>AUTOIGNITION TEMPERATURE:</b> 536 °F / 280 °C	<b>VOC CONTENT:</b> 100%

**SECTION 10 ⚡ STABILITY AND REACTIVITY**

- CHEMICAL STABILITY:** Stable under normal temperatures and pressures
- HAZARDOUS REACTION POTENTIAL:** Will not occur
- CONDITIONS TO AVOID:** Avoid high temperatures, open flames, sparks, welding, smoking and other ignition sources.
- INCOMPATIBLE PRODUCTS:** Keep away from strong oxidizers.
- MATERIALS TO AVOID:** Contact with strong acids/oxidizer.
- HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).
- HAZARDOUS POLYMERIZATION:** Has not been reported
- OTHER PHYSICAL AND CHEMICAL PROPERTIES:** If uninhibited, Natural Gasoline/Diluent will cause rusting of copper and alloys containing copper.

**SECTION 11 ☠ TOXICOLOGICAL INFORMATION**

*NATURAL GASOLINE/DILUENT*

Aspiration of Natural Gasoline/Diluent into the lungs will cause chemical pneumonia. Liquid, mist, or vapors can cause eye, skin and respiratory tract irritation and CNS depression. Mild eye irritation may result from contact with liquid, mist, and/or vapors. Liquid may penetrate skin to cause central nervous system depression. Vapor penetration can also cause systematic effects. Skin irritation or more serious disorders may occur upon prolonged and repeated contact due to skin defatting. Irritation of the mouth, throat, and gastrointestinal tract leading to nausea, vomiting, diarrhea and restlessness. CNS Depression similar to that caused by vapor inhalation. Exposure can cause irritation to the nose, throat, and lungs and signs of CNS depression (dizziness, drowsiness, loss of coordination, coma and death), depending on the concentration/duration of exposure. Long-term exposure to Natural Gasoline/Diluent has also produced kidney damage in laboratory animals. The exact relationship between these results and possible human effects is not known.

Persons with pre-existing skin disorders, impaired liver or kidney function, or CNS and chronic respiratory diseases should avoid exposure to this material. This material may contain benzene at concentrations above 0.1%. Benzene is considered to be a known human carcinogen by OSHA, IARC and NTP.

**Toxicity**

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
LD <sub>50</sub> (oral)	Rat	Not Available	LD <sub>50</sub> (dermal)	Rabbit	Not Available	LC <sub>50</sub> (inh)	Rat (5 minutes)	300 g/M <sup>3</sup>

RTECS #: LX3300000

***N-PENTANE***

Inhalation of very high concentrations of pentane (>10% in air) may cause narcosis and irritation of the mucous membranes (eye, nose, and throat). In humans, inhalation of 5000 ppm for 10 minutes failed to cause these symptoms. There is no report in the literature indicating any adverse effects from pentane other than narcosis and irritation.

**TOXICITY**

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
LD <sub>50</sub> (oral)	Rat	446 g/kg	LD <sub>50</sub> (dermal)	Rabbit	No Data	LC <sub>50</sub> (inh)	Rat (4 hours)	364 g/M <sup>3</sup>

Specific organ toxicity, single exposure: No data available

Specific organ toxicity, repeated exposure: Liver damage

**CARCINOGENICITY**

<b>IARC</b>	Not Listed
<b>NTP</b>	Not Listed

<b>California (Prop 65):</b> Not Listed as carcinogen	<b>NIOSH:</b> Not Listed	<b>ACGIH:</b> Not Listed	<b>OSHA:</b> Not Listed
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**MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS**

Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Skin-rabbit: skin irritation	Serious eye damage, irritation-rabbit: No data available
Synergistic effects: No data available	Aspiration hazard: No data available

RTECS #: RZ9450000

***BUTANE***

Butane is a colorless gas with no odor, although an odorant is sometimes added to the gas to provide warning of its presence. Health effects may include drowsiness, narcosis, asphyxia; cardiac arrhythmia at high concentrations and frostbite from contact with liquid.

**TOXICITY**

Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC <sub>50</sub> (inh)	Mouse (2 hours)	680 g/M <sup>3</sup>	LD <sub>50</sub> (dermal)	Rabbit	No Data	LC <sub>50</sub> (inh)	Rat (4 hours)	658 g/M <sup>3</sup>

Specific organ toxicity, single exposure: May cause drowsiness or dizziness

Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.

**CARCINOGENICITY**

Testicular tumors shown in rats.

<b>IARC</b>	Not Listed
<b>NTP</b>	Not Listed

<b>California (Prop 65):</b> Not listed as carcinogen	<b>NIOSH:</b> Not Listed	<b>ACGIH:</b> Not Listed	<b>OSHA:</b> Not Listed
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<b>MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS</b>	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: No data available
Reproductive toxicity: No data available	Teratogenicity: No data available
Skin Corrosion/irritation: Skin-rabbit: skin irritation	Serious eye damage, irritation-rabbit: No data available
Synergistic effects: No data available	Aspiration hazard: No data available
RTECS #: EJ4200000	

***BENZENE***

Acute inhalation effects may cause respiratory tract irritation drowsiness, unconsciousness, and central nervous system depression. Potential symptoms of overexposure by inhalation are dizziness, headache, vomiting, visual disturbances, staggering gait, hilarity, fatigue, and other symptoms of CNS depression.

Chronic exposures may cause bone marrow abnormalities with damage to blood forming tissues. May cause anemia and other blood cell abnormalities. Chronic exposure to benzene has been associated with an increased incidence of leukemia and multiple myeloma (tumor composed of cells of the type normally found in the bone marrow). This substance has caused adverse reproductive and fetal effects in laboratory animals.

Toxicity								
Type of Dose	Specie	Result	Type of Dose	Specie	Result	Type of Dose	Specie	Result
LD <sub>50</sub> (oral)	Rat	930 mg/kg	LD <sub>50</sub> (dermal)	Rabbit	9.4 ml/kg	LC <sub>50</sub> (inh)	Mouse (4 hours)	9,980 ppm
Specific organ toxicity, single exposure: May cause drowsiness or dizziness					Specific organ toxicity, repeated exposure: may cause damage to organs from repeated or prolonged exposure. May cause nervous system damage.			

<b>CARCINOGENICITY</b>			
<b>IARC</b>	Sufficient evidence in animals	Sufficient evidence in humans	Group 1: classifiable as a human carcinogen
<b>NTP</b>	Carcinogen		
<b>California (Prop 65):</b> Listed as carcinogen	<b>NIOSH:</b> Potential Occupational Carcinogen	<b>ACGIH:</b> A1 - Confirmed human carcinogen	<b>OSHA:</b> Select Carcinogen

<b>MUTAGENICITY, TERATOGENICITY AND REPRODUCTIVE EFFECTS</b>	
Respiratory or Skin sensitization: No data available	Germ cell mutagenicity: lab testing shows mutagenic effects (in vivo). Genotoxicity in humans (in vivo) lymphocyte. Genotoxic damage shown in mice.
Reproductive toxicity: inhalation toxicity in mouse, including embryonic and fetal effects including death	Teratogenicity: Rat inhalation include effects include stunted fetus and death Mouse inhalation include effects include cytological changes and abnormalities to blood and lymphatic system.
Skin Corrosion/irritation: will cause skin irritation	Serious eye damage, irritation -rabbit: mild eye irritation
Synergistic effects: damage to bone marrow	Aspiration hazard: May be fatal if swallowed and enters airway.
RTECS #: CY1400000	

**SECTION 12 \* ECOLOGICAL INFORMATION**

<b><i>n-PENTANE</i></b>					
<b>TOXICITY</b>					
Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC <sub>50</sub>	Rainbow trout	9.87 g/L 96 Hours	EC <sub>50</sub>	Water Flea	9.7 g/L 48 Hours
EC <sub>50</sub>	Green algae	No Data	EC <sub>50</sub>	Microtox	No Data
Log P <sub>ow</sub>	3.39		BCF	1.9-2.35	

***BUTANE***

**TOXICITY**

Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC <sub>50</sub>	fathead minnow	No Data	EC <sub>50</sub>	Water Flea	No Data
EC <sub>50</sub>	Green algae	No Data	EC <sub>50</sub>	Microtox	No Data

**BIOACCUMULATIVE POTENTIAL**

Log P <sub>ow</sub>	2.89	BCF	1.78 - 1.97
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**BENZENE**

**TOXICITY**

Type of Dose	Specie	Result	Type of Dose	Specie	Result
LC <sub>50</sub>	fathead minnow	15-32 mg/L 96 hours	EC <sub>50</sub>	Water Flea	10 mg/L 48 Hours
EC <sub>50</sub>	Green algae	29 mg/L 72 Hours	EC <sub>50</sub>	Microtox	No Data

**BIOACCUMULATIVE POTENTIAL**

Log P <sub>ow</sub>	1.83	BCF	4.265
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**SECTION 13 \* DISPOSAL CONSIDERATIONS**

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations  
 Maximize product recovery for reclaim and reuse. Implement waste minimization principles. EPA U.S. Waste Codes: "Ignitable hazardous waste" (D001 and D018), unless proven otherwise. Use approved treatment, transporters, and disposal sites in compliance with all laws.  
 Waste Disposal Method: Should not be released into the environment.  
 Contaminated Packaging: Dispose of in accordance with local regulations.  
 US EPA Waste Number: D018 and D001

**SECTION 14 ☐ TRANSPORTATION INFORMATION**

Not Meant To Be All Inclusive - Check Local, State, And Federal Laws And Regulations			
Element	U.S. DOT	IMDG	IATA
UN Number	UN 1993	UN 1993	UN 1993
UN Proper Shipping Name	Flammable Liquids, N.O.S. (Pentane, Butane)	Flammable Liquids, N.O.S. (Pentane, Butane)	Flammable Liquids, N.O.S. (Pentane, Butane)
Hazard Class	3	3	3
Placard/Label			
Environmental Hazard	Yes	Yes	Yes
Packing Group	I	I	I

**SECTION 15 ) REGULATORY INFORMATION**

Agency	Listing Guidance only, consult specific regulations
OSHA	All ingredients are listed as hazardous under 29 CFR 1910.1200
CERCLA RQ's (40 CFR Part 102)	Benzene – 10 pounds
TSCA 8(a)	All components are listed or exempted
TSCA 8(b)	All components are listed or exempted
SARA (40 CFR Part 355) TPQ's	None of the ingredients are listed
SARA 302/304/311/312 extremely hazardous substances	None of the ingredients are listed
SARA 302/304 emergency planning and notification	None of the ingredients are listed
SARA 302/304/311/312 hazardous chemicals	Natural Gasoline/Diluent
RCRA	Benzene - U019
State Regulations: Massachusetts, New Jersey, New York and Pennsylvania	Natural Gasoline/Diluent, Butane, Benzene and Pentane
SARA 311/312 SDS distribution - chemical inventory - hazard identification	Natural Gasoline/Diluent: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Butane: Fire hazard, and Pentane: Fire hazard.
EPA Form R Toxic Chemical Release Inventory	Benzene
Clean Water Act (CWA) 307	Benzene
Clean Water Act (CWA) 311	Benzene
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Listed
Clean Air Act Section 602 Class I Substances	Not Listed
Clean Air Act Section 602 Class II Substances	Not Listed

**SECTION 16 ⌘ OTHER INFORMATION**

<p><b>NFPA LABEL</b></p>	<p><b>HMIS III LABEL</b></p> <p><u>Personal Protection Index</u> NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.</p>
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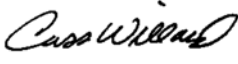
Acronym List		
°F=degrees Fahrenheit	°C=degrees Celsius	ACGIH= American Conference of Industrial Hygienists
APR=Air Purifying Respirator	BCF= Bioconcentration Factor	BuAc=Butyl Acetate
CANUTEC= Canadian Transport Emergency Centre	CAS=Chemical Abstract Service	CERCLA= Comprehensive Environmental Response, Compensation, and Liability Act
CHEMTREC= Chemical Transportation Emergency Center	CNS=Central Nervous System	CWA=Clean Water Act
DOT=Department of Transportation	EC50= Effective Concentration Fifty	EPA=Environmental Protection Agency
g/Kg=Grams per Kilogram	g/M <sup>3</sup> =Grams per Cubic Meter	GHS=Global Harmonization System
H <sub>2</sub> O=Water	HAP=Hazardous Air Pollutants	HMIS= Hazardous Materials Identification System
IARC= International Agency for Research on Cancer	IATA= International Air Transport Association	IMDG= International Maritime Dangerous Goods
LC <sub>50</sub> =Lethal Concentration Fifty	LD <sub>50</sub> =Lethal Dose Fifty	LEL=Lower Explosive Limit
Log P <sub>ow</sub> =Octanol/water partition coefficient	mg/Kg=Milligrams per Kilogram	mg/L=Milligrams per Liter
mL/Kg=Milliliters per Kilogram	mm HG=millimeters of mercury	NFPA=National Fire Protection Association
NIOSH= National Institute for Occupational Safety and Health	NTP=National Toxicology Program	OSHA=Occupational Safety and Health Administration
PEL=Permissible Exposure Limit	ppm=Parts per Million	RCRA=Resource Conservation and Recovery Act
RQ=Reportable Quantities	RTECS=Registry of Toxic Effects of Chemical Substances	REL=Recommended Exposure Limit
SARA= Superfund Amendments and Reauthorization Act	SDS=Safety Data Sheet	SETIQ= Emergency Transportation System for the Chemical Industry; Mexico
STEL=Short Term Exposure Limit	TLV=Threshold Limit Value	TPQ=Threshold Planning Quantity
TSCA=Toxic Substance and Control Act	TWA=Time Weighted Average	UEL=Upper Explosive Limit
VOC=Volatile Organic Compounds		

**SDS REVISIONS:** General update

<b>SDS CREATION DATE:</b> 04/15/14	<b>REVISION #2:</b> 07/12/23
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**DISCLAIMER**

The information in this SDS was obtained from sources which we believe are reliable. **HOWEVER, THE INFORMATION IS PROVIDED WITHOUT ANY WARRANTY, EXPRESSED OR IMPLIED, REGARDING ITS ACCURACY.** Some conditions or methods of handling, storage, use and disposal of the product 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 THE PRODUCT.** All product measurements such as flash point, etc. are considered approximate values. All data provided by Explorer Pipeline Company. This SDS was prepared and is to be used only for this product.

SDS DEVELOPER: <u></u> Cass Willard, CIH	DATE: 07/12/23
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