

## Safety Data Sheet

## Section 1: Identification of the substance or mixture and of the supplier

Product Name: SDS Number:

Synonyms/Other Means of Identification:

Intended Use:

Manufacturer:

Miscible Gas Injectant 787108

**Miscible Injectant** 

Injectant

ConocoPhillips Alaska, Inc. A Subsidiary of ConocoPhillips P.O. Box 100360 700 G. Street Anchorage, AK 99510-0360

Chemtrec: 800-424-9300 (24 Hours)

**Emergency Health and Safety Number:** 

**Customer Service:** 

**Technical Information:** 

**SDS Information:** 

907-659-7812

907-659-7812

Phone: 855-244-0762 Email: SDS@conocophillips.com URL: www.conocophillips.com

# Section 2: Hazard(s) Identification

### **Classification**

- H220 -- Flammable gases -- Category 1
- H280 -- Gases under pressure -- Liquefied gas
- H315 -- Skin corrosion/irritation -- Category 2
- H336 -- Specific target organ toxicity (single exposure) -- Category 3
- H340 -- Germ cell mutagenicity -- Category 1B
- H350 -- Carcinogenicity -- Category 1B
- H361F -- Reproductive toxicity -- Category 2
- H361D -- Reproductive toxicity -- Category 2

Label Elements



DANGER Extremely flammable gas. (H220)\* Contains gas under pressure. May explode if heated. (H280)\* Causes skin irritation. (H315)\* May cause drowsiness or dizziness. (H336)\* May cause cancer. (H350)\* Suspected of damaging fertility or the unborn child. (H361)\* May cause genetic defects. (H340)\* Gas may reduce oxygen in confined spaces.

#### Precautionary Statement(s):

Obtain special instructions before use. (P201)\* Do not handle until all safety precautions have been read and understood. (P202)\* Keep container tightly closed. (P233)\* Use personal protective equipment as required. (P281)\* Keep away from heat/sparks/open flames/hot surfaces. - No smoking. (P210)\* Take precautionary measures against static discharge. (P243)\* Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)\* Avoid contact during pregnancy and while nursing. (P263)\* Wash thoroughly after handling. (P264)\* Use only outdoors or in a well-ventilated area. (P271)\* Wear protective gloves / protective clothing / eye protection / face protection. (P280)\* Leaking gas fire: Do not extinguish, unless leak can be stopped safely. (P377)\* Eliminate all ignition sources if safe to do so. (P381)\* IF ON SKIN: Wash with plenty of soap and water. (P352)\* If skin irritation occurs: Get medical advice/attention. (P313)\* Take off contaminated clothing and wash before reuse. (P362)\* IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. (P340)\* Call a POISON CENTER or doctor/physician if you feel unwell. (P312)\* Protect from sunlight. Store in a well ventilated place. (P410+P403)\* Store locked up. (P405)\* Dispose of contents/container to approved disposal facility. (P501)\*

\* (Applicable GHS hazard code.)

## Section 3: Composition / Information on Ingredients

Component	CASRN	Concentration <sup>1</sup>
Natural gas	8006-14-2	55-65
Natural gas (petroleum), raw liq. mix	64741-48-6	35-45
Benzene	71-43-2	<1

<sup>1</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### Section 4: First Aid Measures

**Eye Contact:** For contact with the liquefied gas, remove contact lenses if present and easy to do, hold eyelids apart and gently flush the affected eye(s) with lukewarm water. Seek immediate medical attention.

**Skin Contact:** Remove contaminated shoes and clothing, and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water or a waterless hand cleaner. If irritation or redness develops, seek medical attention. Wash contaminated clothing before reuse.

**Inhalation (Breathing):** If respiratory symptoms develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If breathing is difficult, oxygen or artificial respiration should be administered by qualified personnel. If symptoms persist, seek medical attention.

Ingestion (Swallowing): This material is a gas under normal atmospheric conditions and ingestion is unlikely.

#### Most important symptoms and effects

Acute: Anesthetic effects at high concentrations.

Delayed: None known or anticipated. See Section 11 for information on effects from chronic exposure, if any.

**Notes to Physician:** Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (e.g., in enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered, observe for the development of cardiac arrhythmias.

Federal regulations (29 CFR 1910.1028) specify medical surveillance programs for certain exposures to benzene above the action level or PEL (specified in Section (i)(1)(i) of the Standard). In addition, employees exposed in an emergency situation shall, as described in Section (i)(4)(i), provide a urine sample at the end of the shift for measurement of urine phenol.

# Section 5: Fire-Fighting Measures



NFPA 704 Hazard Class

Health: 2 Flammability: 4 Instability: 0 (0-Minima

(0-Minimal, 1-Slight, 2-Moderate, 3-Serious, 4-Severe)

**Unusual Fire & Explosion Hazards:** Extremely flammable. Contents under pressure. This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Vapors may travel considerable distances to a source of ignition where they can ignite, flash back, or explode. May create vapor/air explosion hazard indoors, in confined spaces, outdoors, or in sewers. If container is not properly cooled, it can rupture in the heat of a fire. Drains can be plugged and valves made inoperable by the formation of ice if rapid evaporation of large quantities of the liquefied gas occurs. Do not allow run-off from fire fighting to enter drains or water courses – may cause explosion hazard in drains and may reignite.

**Extinguishing Media:** Dry chemical or carbon dioxide is recommended. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

**Fire Fighting Instructions:** For fires beyond the initial stage, emergency responders in the immediate hazard area should wear protective clothing. When the potential chemical hazard is unknown, in enclosed or confined spaces, a self contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

Isolate immediate hazard area and keep unauthorized personnel out. Stop spill/release if it can be done safely. If this cannot be done, allow fire to burn. Move undamaged containers from immediate hazard area if it can be done safely. Stay away from ends of container. Water spray may be useful in minimizing or dispersing vapors and to protect personnel. Cool equipment exposed to fire with water, if it can be done safely.

**Hazardous Combustion Products:** Combustion may yield smoke, carbon monoxide, and other products of incomplete combustion. Oxides of nitrogen and sulfur may also be formed.

### See Section 9 for Flammable Properties including Flash Point and Flammable (Explosive) Limits

## Section 6: Accidental Release Measures

**Personal Precautions:** Extremely flammable. Spillages of liquid product will create a fire hazard and may form an explosive atmosphere. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Beware of accumulation of gas in low areas or contained areas, where explosive concentrations may occur. Prevent from entering drains or any place where accumulation may occur. Ventilate area and allow to evaporate. Stay upwind and away from spill/release. Avoid direct contact with material. For large spillages, notify persons down wind of the spill/release, isolate immediate hazard area and keep unauthorized personnel out. Wear appropriate protective equipment, including respiratory protection, as conditions warrant (see Section 8). See Sections 2 and 7 for additional information on hazards and precautionary measures.

**Environmental Precautions:** Stop spill/release if it can be done safely. Water spray may be useful in minimizing or dispersing vapors. If spill occurs on water notify appropriate authorities and advise shipping of any hazard.

Methods for Containment and Clean-Up: Notify relevant authorities in accordance with all applicable regulations.

Recommended measures are based on the most likely spillage scenarios for this material; however local conditions and regulations may influence or limit the choice of appropriate actions to be taken.

## Section 7: Handling and Storage

**Precautions for safe handling:** Keep away from ignition sources such as heat/sparks/open flame – No smoking. Take precautionary measures against static discharge. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling. Use good personal hygiene practices and wear appropriate personal protective equipment (see section 8).

Contents under pressure. Gas can accumulate in confined spaces and limit oxygen available for breathing. Use only with adequate ventilation. The use of explosion-proof electrical equipment is recommended and may be required (see appropriate fire codes). Refer to NFPA-70 and/or API RP 2003 for specific bonding/grounding requirements. Electrostatic charge may accumulate and create a hazardous condition when handling or processing this material. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Do not enter confined spaces such as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. Cold burns may occur during filling operations. Containers and delivery lines may become cold enough to present cold burn hazard.

**Conditions for safe storage:** Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, wellventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. Avoid exposing any part of a compressed-gas cylinder to temperatures above 125F(51.6C). Gas cylinders should be stored outdoors or in well ventilated storerooms at no lower than ground level and should be quickly removable in an emergency.

## Section 8: Exposure Controls / Personal Protection

Component	ACGIH	OSHA	Other
Natural gas	TWA: 1000 ppm as Aliphatic Hydrocarbons C1-4		
Natural gas (petroleum), raw liq. mix	TWA: 300 ppm (as Gasoline)	TWA: 400 mg/m <sup>3</sup> TWA: 100 ppm	0.5 ppm TWA8hr (as benzene) 0.25 ppm TWA12hr (as benzene) 2.5 ppm STEL (as benzene) (ConocoPhillips Guidelines)
Benzene	STEL: 2.5 ppm TWA: 0.5 ppm Skin	Ceiling: 25 ppm STEL: 5 ppm TWA: 10 ppm TWA: 1 ppm	

Note: State, local or other agencies or advisory groups may have established more stringent limits. Consult an industrial hygienist or similar professional, or your local agencies, for further information.

**Engineering controls:** If current ventilation practices are not adequate to maintain airborne concentrations below the established exposure limits, additional engineering controls may be required.

**Eye/Face Protection:** The use of eye protection (such as splash goggles) that meets or exceeds ANSI Z.87.1 is recommended when there is potential liquid contact to the eye. Depending on conditions of use, a face shield may be necessary.

**Skin/Hand Protection:** The use of gloves impervious to the specific material handled is advised to prevent skin contact. Users should check with manufacturers to confirm the breakthrough performance of their products. Depending on exposure and use conditions, additional protection may be necessary to prevent skin contact including use of items such as chemical resistant boots, aprons, arm covers, hoods, coveralls, or encapsulated suits. Wear thermal insulating gloves and face shield or eye protection when working with materials that present thermal hazards (hot or cold).

**Respiratory Protection:** A NIOSH approved, self-contained breathing apparatus (SCBA) or equivalent operated in a pressure demand or other positive pressure mode should be used in situations of oxygen deficiency (oxygen content less than 19.5 percent), unknown exposure concentrations, or situations that are immediately dangerous to life or health (IDLH).

A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use.

If benzene concentrations equal or exceed applicable exposure limits, OSHA requirements for personal protective equipment, exposure monitoring, and training may apply (29CFR1910.1028 - Benzene).

**Other Protective Equipment:** Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before reuse.

Suggestions provided in this section for exposure control and specific types of protective equipment are based on readily available information. Users should consult with the specific manufacturer to confirm the performance of their protective equipment. Specific situations may require consultation with industrial hygiene, safety, or engineering professionals.

### Section 9: Physical and Chemical Properties

Note: Unless otherwise stated, values are determined at 20°C (68°F) and 760 mm Hg (1 atm). Data represent typical values and are not intended to be specifications.

Appearance:	Colorless	
Physical Form:	Liquefied Gas	
Odor:	No distinct odor	
Odor Threshold:	No data	
pH:	Not applicable	
Vapor Pressure:	2-400 mm Hg	
Vapor Density (air=1):	>1	
Initial Boiling Point/Range:	-44 °F / -42 °C	
Melting/Freezing Point:	-69 °F / -56 °C	
Solubility in Water:	Slight	
Partition Coefficient (n-octanol/water) (Kow):	No data	
Specific Gravity (water=1):	0.3-0.7 @ 60°F (15.6°C)	
Percent Volatile:	100%	
Evaporation Rate (nBuAc=1):	No data	
Flash Point:	< -100 °F / < -73 °C	
Test Method:	(estimate)	
Lower Explosive Limits (vol % in air):	2.3	
Upper Explosive Limits (vol % in air):	10.2	
Auto-ignition Temperature:	No data	

## Section 10: Stability and Reactivity

Stability: Stable under normal ambient and anticipated conditions of use.

Conditions to Avoid: Avoid all possible sources of ignition. Heat will increase pressure in the storage tank.

Materials to Avoid (Incompatible Materials): Avoid contact with acids, aluminum chloride, chlorine, chlorine dioxide, halogens and oxidizing agents.

Hazardous Decomposition Products: Not anticipated under normal conditions of use.

Hazardous Polymerization: Not known to occur.

## Section 11: Toxicological Information

### Information on Toxicological Effects of Substance/Mixture

Acute Toxicity	Hazard	Additional Information	LC50/LD50 Data
Inhalation	Unlikely to be harmful	Asphyxiant. High concentrations in confined spaces may limit oxygen available for breathing. See Signs and Symptoms.	> 20,000 ppm (gas, estimated)
Skin Absorption	Skin absorption is not anticipated		Not applicable
Ingestion (Swallowing)	Ingestion is not anticipated		Not applicable

#### Aspiration Hazard: Not applicable

**Skin Corrosion/Irritation:** Causes skin irritation. Contact with the liquefied or pressurized gas may cause frostbite ("cold" burn). Repeated exposure may cause skin dryness or cracking.

**Serious Eye Damage/Irritation:** Causes mild eye irritation. Contact with the liquefied or pressurized gas may cause momentary freezing followed by swelling and eye damage.

**Signs and Symptoms:** Light hydrocarbon gases are simple asphyxiants and can cause anesthetic effects at high concentrations. Symptoms of overexposure, which are reversible if exposure is stopped, can include shortness of breath, drowsiness, headaches, confusion, decreased coordination, visual disturbances and vomiting. Continued exposure can lead to hypoxia (inadequate oxygen), rapid breathing, cyanosis (bluish discoloration of the skin), numbness of the extremities, unconsciousness and death.

Skin Sensitization: Skin contact is not anticipated.

**Respiratory Sensitization:** No information available on the mixture, however none of the components have been classified for respiratory sensitization (or are below the concentration threshold for classification).

Specific Target Organ Toxicity (Single Exposure): May cause drowsiness and dizziness.

Specific Target Organ Toxicity (Repeated Exposure): Not expected to cause organ effects from repeated exposure.

Carcinogenicity: May cause cancer. Based on component information.

Germ Cell Mutagenicity: May cause genetic defects. Based on component information.

**Reproductive Toxicity:** Suspected of damaging the unborn child. Suspected of damaging fertility. Based on component information.

**Other Comments:** High concentrations may reduce the amount of oxygen available for breathing, especially in confined spaces. Hypoxia (inadequate oxygen) during pregnancy may have adverse effects on the developing fetus.

## Information on Toxicological Effects of Components

### Natural gas (petroleum), raw liq. mix

*Carcinogenicity:* Two year inhalation studies of vaporized unleaded gasoline produced an increased incidence of kidney tumors in male rats and liver tumors in female mice. Repeated skin application of various petroleum naphthas in mice for two years resulted in an increased incidence of skin tumors but only in the presence of severe skin irritation. Follow-up mechanistic studies suggest that the occurrence of these tumors may be the consequence of promotional processes and not relevant to human risk assessment. Epidemiology data collected from a study of more than 18,000 petroleum marketing and distribution workers showed no increased risk of leukemia, multiple myeloma, or kidney cancer from gasoline exposure. Unleaded gasoline has been identified as a possible carcinogen by the International Agency for Research on Cancer.

**Target Organs:** Two year inhalation studies of wholly vaporized unleaded gasoline, and 90 days studies of various petroleum naphthas, did not produce significant target organ toxicity in laboratory animals. Nephropathy in male rats, characterized by the accumulation of alpha-2-u- globulin in epithelial cells of the proximal tubules was observed, however follow-up studies suggest that these changes are unique to the male rat.

**Reproductive Toxicity:** No evidence of developmental toxicity was found in pregnant laboratory animals (rats and mice) exposed to high vapor concentrations of unleaded gasoline and petroleum naphthas via inhalation. A two-generation reproductive toxicity study of vapor recovery gasoline did not adversely affect reproductive function or offspring survival and development.

## <u>n-Hexane</u>

**Target Organs:** Excessive exposure to n-hexane can result in peripheral neuropathies. The initial symptoms are symmetrical sensory numbness and paresthesias of distal portions of the extremities. Motor weakness is typically observed in muscles of the toes and fingers but may also involve muscles of the arms, thighs and forearms. The onset of these symptoms may be delayed for several months to a year after the beginning of exposure. The neurotoxic properties of n-hexane are potentiated by exposure to methyl ethyl ketone and methyl isobutyl ketone.

**Reproductive Toxicity:** Prolonged exposure to high concentrations of n-hexane (>1,000 ppm) resulted in decreased sperm count and degenerative changes in the testes of rats but not those of mice.

## <u>Toluene</u>

*Carcinogenicity:* Exposure of rats and mice to toluene at concentrations ranging from 120-1200 ppm for two years did not demonstrate evidence of carcinogenicity. Toluene has not been listed as a carcinogen by IARC.

*Target Organs:* Epidemiology studies suggest that chronic occupational overexposure to toluene may damage color vision. Subchronic and chronic inhalation studies with toluene produced kidney and liver damage, hearing loss and central nervous system (brain) damage in laboratory animals. Intentional misuse by deliberate inhalation of high concentrations of toluene has been shown to cause liver, kidney, and central nervous system damage, including hearing loss and visual disturbances. *Reproductive Toxicity:* Exposure to toluene during pregnancy has demonstrated limited evidence of developmental toxicity in laboratory animals. Decreased fetal body weight and increased skeletal variations in both inhalation and oral studies, but only

aboratory animals. Decreased fetal body weight and increased skeletal variations in both inhalation and oral studies, but only at doses that were maternally toxic. No fetal toxicity was seen at doses that were not maternally toxic. Decreased sperm counts have been observed in male rats in the absence of a reduction in fertility. Toluene has been reported to cause mental or growth retardation in the children of solvent abusers who directly inhale toluene during pregnancy.

## Cyclohexane

**Reproductive Toxicity:** Two-generation reproduction and developmental toxicity studies using rats and rabbits exposed (whole-body) to atmospheric concentrations up to 7000 ppm cyclohexane did not detect evidence of developmental toxicity in either species.

### Benzene

*Carcinogenicity:* Benzene is an animal carcinogen and is known to produce acute myelogenous leukemia (a form of cancer) in humans. Benzene has been identified as a human carcinogen by IARC, the US National Toxicology Program and the US-Occupational Safety and Health Administration.

*Target Organs:* Prolonged or repeated exposures to benzene vapors can cause damage to the blood and blood forming organs, including disorders like leukopenia, thrombocytopenia, and aplastic anemia.

**Reproductive Toxicity:** Some studies in occupationally exposed women have suggested benzene exposure increased risk of miscarriage and stillbirth and decreased birth weight and gestational age. The size of the effects detected in these studies was small, and ascertainment of exposure and outcome in some cases relied on self-reports, which may limit the reliability of these results.

*Germ Cell Mutagenicity:* Benzene exposure has resulted in chromosomal aberrations in human lymphocytes and animal bone marrow cells. Exposure has also been associated with chromosomal aberrations in sperm cells in human and animal studies.

## Section 12: Ecological Information

**Toxicity:** Petroleum gases will readily evaporate from the surface and would not be expected to have significant adverse effects in the aquatic environment. Classification: No classified hazards.

**Persistence and Degradability:** The hydrocarbons in this material are expected to be inherently biodegradable. In practice, hydrocarbon gases are not likely to remain in solution long enough for biodegradation to be a significant loss process. Hydrogen sulfide, if present in refinery gas streams, will be rapidly oxidized in water and insoluble sulfides precipitated from water when metallic radicals are present.

**Bioaccumulative Potential:** Since the log Kow values measured for refinery gas constituents are below 3, they are not regarded as having the potential to bioaccumulate.

**Mobility in Soil:** Due to the extreme volatility of petroleum gases, air is the only environmental compartment in which they will be found. In air, these hydrocarbons undergo photodegradation by reaction with hydroxyl radicals with half-lives ranging from 3.2 days for n-butane to 7 days for propane.

Other Adverse Effects: None anticipated.

## Section 13: Disposal Considerations

This material is a gas and would not typically be managed as a waste.

## Section 14: Transport Information

#### U.S. Department of Transportation (DOT)

Shipping Description:	UN1965, Hydrocarbon gas mixture, liquefied, n.o.s., 2.1;
Non-Bulk Package Marking:	Hydrocarbon gas mixture, liquefied, n.o.s., UN1965
Non-Bulk Package Labeling:	Flammable gas
Bulk Package/Placard Marking:	Flammable gas / 1965
Packaging - References:	49 CFR: 173.306; 173.304; 173.314 & .315
	(Exceptions; Non-bulk; Bulk)
Hazardous Substance:	See Section 15 for RQ's
Emergency Response Guide:	115

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Note:	The following alternate shipping description order may be used until January 1, 2013: Proper Shipping name, Hazard Class or Division, (Subsidiary Hazard if any), UN or NA number, Packing Group Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable Other shipping description elements may be required for DOT compliance.			
International Maritime Dangerous G	oods (IMDG)			
Shipping Description: Non-Bulk Package Marking: Labels: Placards/Marking (Bulk): Packaging - Non-Bulk: EMS:	UN1965, Hy Hydrocarbon Flammable g Flammable g P200 F-D, S-U	drocarbon gas mixture, liqu gas mixture, liquefied, n.o as as / 1965	uefied, n.o.s., (Methane , .s., (Methane, Propane), U	, Propane ), 2.1 IN1965
International Civil Aviation Org. / Int	ernational Ai	r Transport Assoc. (ICAC	D/IATA)	
UN/ID #:	UN1965	· · · · · · · · · · · ·		
Proper Shipping Name:	Hydrocarbon	gas mixture, liquefied, n.o	.s. (Methane, Propane,)	
Hazard Class/Division:	2.1			
Subsidiary risk:	None			
Packing Group:	None			
Non-Bulk Package Marking:	Hydrocarbon	gas mixture, liquefied, n.o	.s. (Methane, Propane), U	N1965
Labels:	Flammable g	as		
ERG Code:	10L	LTD. QTY	Passenger Aircraft	Cargo Aircraft Only
Packaging Instruction #:				
Max. Net Qty. Per Package:			Forbidden	150 kg

# Section 15: Regulatory Information

## CERCLA/SARA - Section 302 Extremely Hazardous Substances and TPQs (in pounds):

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This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

#### CERCLA/SARA - Section 311/312 (Title III Hazard Categories)

Acute Health:	Yes
Chronic Health:	Yes
Fire Hazard:	Yes
Pressure Hazard:	Yes
Reactive Hazard:	No

### CERCLA/SARA - Section 313 and 40 CFR 372:

This material contains the following chemicals subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR 372:

Component	Concentration <sup>1</sup>	de minimis
n-Hexane	2-3	1.0%
Toluene	<3	1.0%
Cyclohexane	<2	1.0%
Benzene	<1	0.1%

### EPA (CERCLA) Reportable Quantity (in pounds):

EPA's Petroleum Exclusion applies to this material - (CERCLA 101(14)).

#### California Proposition 65:

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

Component	Type of Toxicity
Toluene	Developmental Toxicant
	Female Reproductive Toxicant
Benzene	Cancer
	Developmental Toxicant
	Male Reproductive Toxicant

### International Hazard Classification

### **National Chemical Inventories**

All components are either listed on the US TSCA Inventory, or are not regulated under TSCA

#### U.S. Export Control Classification Number: EAR99

### Section 16: Other Information

Date of Issue: Status: Previous Issue Date: Revised Sections or Basis for Revision:

#### 02-Apr-2012 FINAL 20-Feb-2012 Identified Hazards (Section 2) Precautionary Statement(s) (Section 2) First Aid (Section 4) Shipping information (Section 14) Regulatory information (Section 15) 787108

#### SDS Number:

#### Guide to Abbreviations:

ACGIH = American Conference of Governmental Industrial Hygienists; CASRN = Chemical Abstracts Service Registry Number; CEILING = Ceiling Limit (15 minutes); CERCLA = The Comprehensive Environmental Response, Compensation, and Liability Act; EPA = Environmental Protection Agency; GHS = Globally Harmonized System; IARC = International Agency for Research on Cancer; INSHT = National Institute for Health and Safety at Work; IOPC = International Oil Pollution Compensation; LEL = Lower Explosive Limit; NE = Not Established; NFPA = National Fire Protection Association; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit (OSHA); SARA = Superfund Amendments and Reauthorization Act; STEL = Short Term Exposure Limit (15 minutes); TLV = Threshold Limit Value (ACGIH); TWA = Time Weighted Average (8 hours); UEL = Upper Explosive Limit; WHMIS = Worker Hazardous Materials Information System (Canada)

#### **Disclaimer of Expressed and implied Warranties:**

The information presented in this Material Safety Data Sheet is based on data believed to be accurate as of the date this Material Safety Data Sheet was prepared. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED ABOVE, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. No responsibility is assumed for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices. The information provided above, and the product, are furnished on the condition that the person receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that the yeasume the risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.