

SAFETY DATA SHEET

Targa Downstream LLC

Date Issued: 03/23/2015 SDS No: TRG201-027 Date Revised: 05/26/2021 Revision No: 1.1

Residue Gas

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Residue Gas

DISTRIBUTOR

Targa Downstream LLC 811 Louisiana, Suite 2100 Houston, TX 77002

24 HR. EMERGENCY TELEPHONE NUMBERS

HEALTH (24 hr): (800) 451-8346

TRANSPORTATION (24 hr): CHEMTREC EMERGENCY NUMBER (24 hr): (800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION: (713) 584-1421

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Simple Asphyxiant

Physical:

Flammable Gases, Category 1

Gases Under Pressure, Liquefied Gas

GHS LABEL



Cylinder

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H000: May displace oxygen and cause rapid suffocation.

H220: Extremely flammable gas.

H280: Contains gas under pressure; may explode if heated.

PRECAUTIONARY STATEMENT(S)

Prevention:

P210: Keep away from heat/sparks/open flames/hot surfaces - no smoking.

Response:

P307+P311: IF exposed: Call a POISON CENTER or doctor/physician.

P377: Leaking gas fire: Do not extinguish unless leak can be stopped safely.

P381: Eliminate all ignition sources if safe to do so.

Storage:

P403: Store in a well-ventilated place.

P410+P403: Protect from sunlight. Store in a well-ventilated place.

Disposal:

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Colorless gas or liquid.

POTENTIAL HEALTH EFFECTS

EYES: The gas phase of this product is not expected to cause eye irritation. However, direct contact with liquefied gas may cause severe and possibly permanent eye injury due to frostbite from rapid liquid evaporation. This hazard evaluation is based on the data from similar materials.

SKIN: The gas phase of this product is not expected to cause skin irritation. However, direct contact with liquefied gas may cause burns, severe injury, and/or frostbite. The systemic toxicity of this substance has not been determined. However, it is anticipated to be practically non-toxic to internal organs if it gets on the skin. This hazard evaluation is based on data from similar materials.

INGESTION: This product is a compressed gas; hence oral exposure and resulting acute toxicity are unlikely.

INHALATION: Inhalation may be irritating if inhaled at high concentrations. Vapors may cause dizziness or asphyxiation without warning.

REPRODUCTIVE TOXICITY

REPRODUCTIVE EFFECTS: Not Established.

TERATOGENIC EFFECTS: Not Established.

CARCINOGENICITY: This product is not listed as a carcinogen by NTP, OSHA, or IARC.

MUTAGENICITY: Not Established.

ROUTES OF ENTRY: Eye contact, inhalation, skin contact.

TARGET ORGAN STATEMENT: Central nervous system (CNS).

SENSITIZATION: Not Established.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	%	CAS
Methane	> 60	74-82-8
Carbon Dioxide	< 20	124-38-9
Nitrogen	< 12	7727-37-9
Ethane	10	74-84-0
Propane	< 10	74-98-6
Butane	< 5	106-97-8
Oxygen	< 3	7782-44-7
Isobutane	Contains	75-28-5
Hydrocarbons, C5 and Higher	Contains	68647-60-9

COMMENTS: This product is classified as a simple asphyxiant. When working with this material, the minimal oxygen content should be 18 percent by volume under normal atmospheric pressure.

4. FIRST AID MEASURES

- **EYES:** The gas phase of this product is not expected to cause eye irritation. However, direct contact with liquefied gas may cause severe and possibly permanent eye injury due to frostbite from rapid liquid evaporation. If eye tissue is frozen, seek medical attention immediately. If tissue is not frozen, thoroughly flush the eyes with large amounts of clean low-pressure water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation persists seek medical attention.
- **SKIN:** The gas phase of this product is not expected to cause skin irritation. However, direct contact with liquefied gas may cause severe and possibly permanent eye injury due to frostbite from rapid liquid evaporation. In case of frostbite, immediately warm affected area with lukewarm water not to exceed 40°C (105°F) for at least 20 minutes. Obtain medical assistance.
- **INGESTION:** First aid is not normally required; however, if swallowed and symptoms develop, seek medical attention.

INHALATION: Move victim to fresh air. Give artificial respiration if victim is not breathing. Do not use mouth-tomouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Administer oxygen if breathing is difficult. Get medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

INHALATION: Signs and symptoms of central nervous system effects may include rapid breathing, incoordination, rapid fatigue, excessive salivation, disorientation, headache, nausea, and vomiting. Convulsions, loss of consciousness, coma, and/or death may occur if exposure to high concentration continues.

NOTES TO PHYSICIAN: Treat symptomatically. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First Aid Responders are advised to wear personal protective equipment as found in Section 8 of this SDS.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Do not extinguish a leaking gas fire unless leak can be stopped.

EXTINGUISHING MEDIA:

SMALL FIRE - Dry chemical, carbon dioxide, or Halon fire extinguisher.

LARGE FIRE - Water spray or fog.

EXPLOSION HAZARDS: Containers may explode when heated.

- **HAZARDOUS COMBUSTION PRODUCTS:** Normal combustion forms carbon dioxide and water vapor; incomplete combustion can produce carbon monoxide.
- **FIRE FIGHTING PROCEDURES: PROTECTIVE ACTIONS TO TAKE DURING FIRE FIGHTING -** This product presents an extreme fire hazard. Liquid very quickly evaporates, even at low temperatures, and forms vapor (fumes) that can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material. Do not get water inside containers. Cool containers with flooding quantities of water until well after fire is out. Do not direct water at source of leak or safety devices; icing may occur. Persons involved in firefighting response involving this product and its containers/packaging should refer to Section 8 of this SDS for the proper selection of exposure controls and personal protective equipment.
- **FIRE FIGHTING EQUIPMENT: PRECAUTIONS FOR FIRE INVOLVING TANKS OR CAR/TRAILER LOADS** Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. Isolate for 1600 meters (1 mile) in all directions; also consider initial evacuation for 1600 meters (1 mile) in all directions. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.
- **FIRE EXPLOSION:** Extremely flammable liquefied gas. Gas may accumulate in confined areas, travel considerable distance to source of ignition and flash back causing fire or explosion. Vapors may form explosive mixtures with air.

6. ACCIDENTAL RELEASE MEASURES

- **SMALL SPILL:** For emergency information and procedures to follow in the case of an accidental release, call the Emergency Telephone Number(s) listed in Section 1 of this SDS. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). As an immediate precautionary measure, isolate spill or leak area for at least 100 meters (330 feet) in all directions. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Allow to dissipate with adequate ventilation.
- **LARGE SPILL:** Dike far ahead of liquid spill for later disposal. Consider initial downwind evacuation for at least 800 meters (1/2 mile). Do not release into sewers or waterways.
- **GENERAL PROCEDURES: MATERIALS & METHODS (EQUIPMENT & TECHNIQUES) FOR CONTAINMENT & CLEANUP -** Call Emergency Telephone Number(s) provided in Section 1 of this SDS. Isolate area until gas has dispersed. Use clean non-sparking tools to collect absorbed material. Use water spray to reduce vapors or divert vapor cloud drift. Avoid water runoff to contact spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing indicated in Section 8 of this SDS.
- **RELEASE NOTES: ENVIRONMENTAL PRECAUTIONS -** Avoid contact of spilled material with soil and prevent runoff from entering surface waterways. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
- **SPECIAL PROTECTIVE EQUIPMENT: EMERGENCY & NON-EMERGENCY RESPONDERS -** Refer to Section 8 of this SDS for appropriate exposure controls and personal protective equipment (PPE).

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Handle in accordance with good industrial hygiene and safety practices. These practices include but are not limited to avoiding unnecessary exposure and prompt removal of material from eyes, skin and clothing. Do not breathe material. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. If needed, take first aid actions as indicated in Section 4 of this SDS.

HANDLING: Wear appropriate personal protective equipment and use exposure controls as indicated in Section 8 of this SDS. Keep away from heat and flame. Do not weld, heat or drill container. Remove contaminated clothing immediately. Do not wear contaminated clothing or shoes. Wash with soap and water after working with this product.

STORAGE: Keep in airtight container away from all heat sources. Store in a segregated and approved area. Store in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Keep container in a well-ventilated area. Store away from incompatible materials such as strong oxidizing materials. Store in the original container or an approved alternative made from compatible material. Do not store in unlabeled containers. Treat empty containers in a similar fashion as residual product may exist. Use appropriate containment to avoid environmental contamination. Before entry into continued spaces that may have contained hazardous material, determine concentrations and take appropriate measures for personal protection. Material presents a hazard that may require personal protective equipment for entry. CONTAINER UNDER PRESSURE.

STORAGE TEMPERATURE: Store containers in a room at ambient temperature.

STORAGE PRESSURE: Containers should be stored in a room at ambient pressure.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL ACGIH TLV		H TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Mathana	TWA	N/E	N/E	N/E	N/E
Methane	STEL	N/E	N/E	N/E	N/E
Carbon Dioxide	ТWA	5000	9000	5000	9000
	STEL	N/E	N/E	30000	54000
Nitrogon	ТWA	N/E	N/E	N/E	N/E
Nitrogen	STEL	N/E	N/E	N/E	N/E
Ethane	ТWA	N/E	N/E	1000	1230
	STEL	N/E	N/E	N/E	N/E
Dranana	TWA	1000	1800	N/E	N/E
Propane	STEL	N/E	N/E	N/E	N/E
Dutana	TWA	N/E	N/E	1000	2377
Butane	STEL	N/E	N/E	N/E	N/E
	TWA	N/E	N/E	N/E	N/E
Oxygen	STEL	N/E	N/E	N/E	N/E
Isabutana	TWA	N/E	N/E	1000	2377
Isobutane	STEL	N/E	N/E	N/E	N/E
Hydrocarbons, C5 and Higher	TWA	N/E	N/E	N/E	N/E
	STEL	N/E	N/E	N/E	N/E

ENGINEERING CONTROLS: Provide adequate general and local exhaust ventilation to meet exposure limit requirements. Provide readily accessible eye wash stations and emergency showers. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Employees should be provided with and required to use safety goggles, chemical goggles and/or full-face splash shields where there is any possibility of product coming in contact with eyes. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of contact lenses. Ensure that an eye wash station is operable and nearby.

SKIN: Any impervious glove including nitrile or neoprene gloves.

- **RESPIRATORY:** Depending on airborne concentration and if exposure exceeds occupational exposure limits, use a NIOSH-approved atmosphere-supplying respirator, an air-purifying respirator with organic vapor cartridges or a full-face respirator with organic vapor canisters to prevent overexposure. In a confined space, wear a self-contained breathing apparatus (SCBA).
- **WORK HYGIENIC PRACTICES:** Use good personal hygiene practices. Avoid repeated and/or prolonged skin exposure. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove contaminated clothing and launder before reuse. Shower after work using plenty of soap and water.
- **OTHER USE PRECAUTIONS: FIREFIGHTING AND OTHER IMMEDIATELY DANGEROUS TO LIFE OR HEALTH CONDITIONS -** A self-contained breathing apparatus with full facepiece operated in a pressuredemand or other positive pressure mode is recommended for firefighting or other immediately dangerous to life and health conditions. Supplied-air respirator with full facepiece and operated in pressure-demand or other positive pressure mode in combination with an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode may also be used.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Colorless gas.

pH: Not Established.

PERCENT VOLATILE: 100

FLASH POINT: -180°C (-292°F) to -60°C (-76°F)

FLAMMABLE LIMITS: 5 to 15

Notes: Flammable limits given as percentage volume in air at normal atmospheric temperature and pressure. **AUTOIGNITION TEMPERATURE:** 540°C (1004°F)

VAPOR PRESSURE: Not Established.

VAPOR DENSITY: 0.55 (Air = 1)

BOILING POINT: -161°C (-28.5°F)

FREEZING POINT: Not Established.

MELTING POINT: Not Established.

EVAPORATION RATE: Not Established.

SPECIFIC GRAVITY: 0.6

FLAMMABILITY - Refer to Section 2 and Section 5 of this SDS for classification and flammability characteristics.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: This product is anticipated to be stable under normal ambient storage and handling conditions of temperature and pressure.

POLYMERIZATION: This product is not anticipated to cause hazardous reactions or polymerizations under normal ambient storage and handling conditions of temperature and pressure.

CONDITIONS TO AVOID: Avoid contact with heat, sparks, open flames and elevated temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: None Determined.

INCOMPATIBLE MATERIALS: Strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Methane	N/E	N/E	N/E
Carbon Dioxide	N/E	N/E	30000 to 50000 ppm (30 min)
Nitrogen	N/E	N/E	N/E
Ethane	N/E	N/E	> 800000 ppm (15 min)
Propane	N/E	N/E	658 mg/L (4 hours)
Butane	N/E	N/E	658 g/m3
Oxygen	N/E	N/E	N/E
Isobutane	N/E	N/E	658 mg/L (4 hours)
Hydrocarbons, C5 and Higher	N/E	N/E	N/E

EYES: The gas phase of this product is not expected to cause eye irritation. Direct contact with liquefied gas may cause severe and possibly permanent eye injury due to frostbite from rapid liquid evaporation. This hazard evaluation is based on the data from similar materials.

SKIN EFFECTS: The gas phase of this product is not expected to cause skin irritation. Direct contact with liquefied gas may cause burns, severe injury, and/or frostbite. This hazard evaluation is based on the data from similar materials.

CARCINOGENICITY

IARC: Not Listed.

NTP: Not Listed.

OSHA: Not Listed.

SENSITIZATION: Not Established.

NEUROTOXICITY: Not Established.

GENETIC EFFECTS: Not Established.

REPRODUCTIVE EFFECTS: Not Established.

TERATOGENIC EFFECTS: Not Established.

MUTAGENICITY: Not Established.

GENERAL COMMENTS:

Butane - An atmospheric concentration of 100,000 ppm (10%) butane is not noticeably irritating to the eyes, nose, or respiratory tract but will produce slight dizziness in a few minutes of exposure. No chronic systemic effect has been reported from occupational exposure.

Isobutane - Isobutane has been shown to increase airway resistance by bronchoconstriction and decrease pulmonary compliance and tidal volume (difficulty in breathing). Air containing 27% isobutane was found to decrease respiratory rate and proved to be fatal to rats.

12. ECOLOGICAL INFORMATION

DISTRIBUTION: Do not discharge into or allow runoff to flow into sewers and natural waterways. Contain spill material and dike for proper disposal.

AQUATIC TOXICITY (ACUTE): This product is not expected to be harmful to aquatic life.

GENERAL COMMENTS: Any other adverse environmental effects, such as environmental fate (exposure), ozone depletion potential, photochemical ozone creation potential, endocrine disrupting potential, and global warming potential are indicated in this section if data exists. Otherwise, this data has not been established.

13. DISPOSAL CONSIDERATIONS

RCRA/EPA WASTE INFORMATION: Under the U.S. Environmental Protection Agency's (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal whether the product meets RCRA criteria for a hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous. Empty containers retain residues. All labeled precautions must be observed.

SECTION COMMENTS: Dispose of material in accordance with national, state, regional, and local regulations. Never discharge directly into sewers or surface water. Consult with environmental regulatory agencies for guidance on acceptable disposal practices for the product, in any form, and its containers/packaging.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Natural gas, compressed. PRIMARY HAZARD CLASS/DIVISION: 2.1

UN/NA NUMBER: 1971

NAERG: 115

LABEL: 2.1: Flammable Gas.

NOTES: The description shown may not apply to all shipping situations. Consult 49 CFR or the appropriate Dangerous Goods Regulations for additional requirements and mode-specific or quantity-specific shipping requirements.

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Natural gas, compressed.

UN NUMBER: 1971

PRIMARY HAZARD CLASS/DIVISION: 2.1 (forbidden on passenger rail)

Note: This product is not permitted for transport on passenger rail per 49 §173.27.

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Natural gas, compressed.

UN NUMBER: 1971

PRIMARY HAZARD CLASS/DIVISION: 2.1 (forbidden on passenger aircraft)

Note: This product is not permitted for transport on passenger aircraft per 49 §173.27.

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Natural gas, compressed.

UN NUMBER: 1971

PRIMARY HAZARD CLASS/DIVISION: 2.1

EmS: F-D, S-U

MARINE POLLUTANT: Not Listed.

LABEL: 2.1

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable

Gas

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Fire hazard. Immediate (acute) health hazard. Sudden release of pressure.**FIRE:** Yes**PRESSURE GENERATING:** Yes**REACTIVITY:** No**ACUTE:** Yes**CHRONIC:** No

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Methane	74-82-8
Carbon Dioxide	124-38-9
Nitrogen	7727-37-9
Ethane	74-84-0
Propane	74-98-6
Butane	106-97-8
Oxygen	7782-44-7
Isobutane	75-28-5
Hydrocarbons, C5 and Higher	68647-60-9

CLEAN AIR ACT

Chemical Name	%	CAS
Ethane	10	74-84-0
Propane	< 10	74-98-6
Isobutane	Contains	75-28-5

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements
Methane	Massachusetts Hazardous Substance Minnesota Chemical of High Concern New Jersey RTK Hazardous Substance New Jersey TCPA EHS Pennsylvania Hazardous Substance
Carbon Dioxide	California Hazardous Substance Maine Hazardous Air Pollutant Massachusetts Hazardous Substance Minnesota Hazardous Substance Pennsylvania Hazardous Substance Washington PELs for Air Contaminants
Nitrogen	Massachusetts Hazardous Substance Minnesota Chemical of High Concern Pennsylvania Hazardous Substance Washington PELs for Air Contaminants
Ethane	Delaware Air Quality Management Massachusetts Hazardous Substance Minnesota Hazardous Substance New Jersey RTK Hazardous Substance New Jersey TCPA EHS Pennsylvania Hazardous Substance Washington PELs for Air Contaminants
Propane	Delaware Air Quality Management Massachusetts Hazardous Substance Minnesota Hazardous Substance New Jersey RTK Hazardous Substance Pennsylvania Hazardous Substance Washington PELs for Air Contaminants

Chemical Name	Requirements
Butane	California Hazardous Substance Delaware Air Quality Management Massachusetts Hazardous Substance Minnesota Hazardous Substance New Jersey RTK Hazardous Substance Pennsylvania Hazardous Substance Washington PELs for Air Contaminants
Oxygen	Massachusetts Hazardous Substance Pennsylvania Hazardous Substance
Isobutane	Delaware Air Quality Management Massachusetts Hazardous Substance New Jersey RTK Hazardous Substance Pennsylvania Hazardous Substance

CALIFORNIA PROPOSITION 65: This product 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.

16. OTHER INFORMATION

REASON FOR ISSUE: This SDS was compiled in conformance with the 2012 update to the OSHA Hazard Communication Standard (29 CFR 1910.1200) structure and standards, superseding all previous SDSs of the aforementioned product.

PREPARED BY: Total Safety d/b/a EHS Services, updated by Targa

REVISION HISTORY: This SDS replaces the 06/08/2015 SDS and updated Targa's corp address.





HMIS RATINGS NOTES: Please refer to Section 8 of this SDS for recommended personal protective equipment. **DATA SOURCES:**

REFERENCES

ACGIH. 2014 Guide to Occupational Exposure Values. Cincinnati, OH. Signature Publications, 2014.

Forsberg, K. et al. Quick Selection Guide to Chemical Protective Clothing. Sixth Edition. Hoboken, NJ. John Wiley & Sons, 2014.

Lide, D.R. CRC Handbook of Chemistry and Physics. 88th Edition. Boca Raton, FL. CRC Press, 2008.

UNECE. Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Third Revised Edition. New York and Geneva. United Nations, 2009.

US DOT; Pipeline and Hazardous Materials Safety Administration. 2008 Emergency Response Guidebook. Neenah, WI. J.J. Keller & Associates, Inc. 2008.

US EPA. Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. [Available] Online: <u>http://www.epa.gov/ceppo/pubs/title3.pdf</u>. Retrieved 02/02/2011.

ADDITIONAL SDS INFORMATION:

<u>KEY / LEGEND</u>

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - Agreement on Dangerous Goods by Road

CAA - Clean Air Act

CAS - Chemical Abstracts Service Registry Number

CDG - Carriage of Dangerous Goods By Road and Rail Manual

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

CFR - Code of Federal Regulations

EINECS - European Inventory of Existing Chemical Substances Registry Number

ERG - Emergency Response Guidebook

EPCRA - Emergency Planning and Community Right-to-Know Act

GHS - Globally Harmonized System of Classification and Labeling of Chemicals

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods Code

IMO - International Maritime Organization

N/E - Not Established

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

PPE - Personal Protective Equipment

RCRA - Resource Conversation and Recovery Act

RID - Regulations Concerning the International Transport of Dangerous Goods by Rail

RQ - Reportable Quantities

SARA - Superfund Amendments and Reauthorization Act of 1986

SDS - Safety Data Sheet

TCC - Tag Closed Cup

TDG - Transportation of Dangerous Goods

TLV - Threshold Limit Value

TSCA - Toxic Substance Control Act

UN/NA - United Nations / North American Number

UNECE - United Nations Economic Commission for Europe

US DOT - United States Department of Transportation

US EPA - United States Environmental Protection Agency

Vol. - Volume

WHMIS - Workplace Hazardous Materials Information System

GENERAL STATEMENTS: Other information not included anywhere else in this SDS is included in this section if, in fact, such data exists.

MANUFACTURER DISCLAIMER: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. NO WARRANTY OF MERCANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.