SAFETY DATA SHEET



Flammable Gas Mixture: Ethane / Isobutane / Isopentane / Methane / N-Butane / N-Pentane / Nitrogen / Propane

Section 1. Identification

GHS product identifier	: Flammable Gas Mixture: Ethane / Isobutane / Isopentane / Methane / N-Butane / N- Pentane / Nitrogen / Propane
Other means of identification	: Not available.
Product use	: Synthetic/Analytical chemistry.
SDS #	: 007348
Supplier's details	: Airgas USA, LLC and its affiliates 259 North Radnor-Chester Road Suite 100 Radnor, PA 19087-5283 1-610-687-5253
Emergency telephone number (with hours of	: 1-866-734-3438

operation)

Section 2. Hazards identification

OSHA/HCS status	 This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the	: FLAMMABLE GASES - Category 1
substance or mixture	GASES UNDER PRESSURE - Compressed gas
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Extremely flammable gas.
	Contains gas under pressure; may explode if heated.
	May form explosive mixtures in Air.
	May displace oxygen and cause rapid suffocation.
Precautionary statements	
General	: Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.
Prevention	: Never Put cylinders into unventilated areas of passenger vehicles. Keep away from heat, sparks, open flames and hot surfaces No smoking. Use and store only outdoors or in a well ventilated place.
Response	: Leaking gas fire: Do not extinguish, unless leak can be stopped safely. Eliminate all ignition sources if safe to do so.
Storage	 Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.
Disposal	: Not applicable.
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Section 2. Hazards identification

Hazards not otherwise classified

: In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Other means of	:	Not available.
identification		

CAS number/other identifiers		
CAS number	:	Not applicable.
Product code	÷	007348

Ingredient name	%	CAS number
methane	8.8 - 99	74-82-8
Nitrogen	0.0001 - 99	7727-37-9
Propane	0.0001 - 91	74-98-6
ethane	0.0001 - 91	74-84-0
N-Butane	0.0001 - 5	106-97-8
isobutane	0.0001 - 5	75-28-5
pentane	0.0001 - 0.9999	109-66-0
isopentane	0.0001 - 0.9999	78-78-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necess	ary first aid measures
Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: As this product is a gas, refer to the inhalation section.
Most important sympt	toms/effects, acute and delayed
Potential acute healt	h effects
Eye contact	: Contact with rapidly expanding gas may cause burns or frostbite.
Inhalation	 Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin contact	: Contact with rapidly expanding gas may cause burns or frostbite

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Section 4. First aid measures

Frostbite	: Try to warm up the frozen tissues and seek medical attention.
Ingestion	: As this product is a gas, refer to the inhalation section.
Over-exposure signs/sym	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	dical attention and special treatment needed, if necessary
Notes to physician	 In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	on appropriate personal protective equipment.

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Section 6. Accidental release measures

For emergency responders	:	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".			
Environmental precautions	:	Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).			
Methods and materials for co	ont	ainment and cleaning up			
Small spill	:	Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.			
Large spill	:	Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.			

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.
Advice on general occupational hygiene	:	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).

Section 8. Exposure controls/personal protection

Control parameters

Occup	ational	exposure	<u>limits</u>

Ingredient name			Exposure limits
pentane			ACGIH TLV (United States, 3/2012). TWA: 600 ppm 8 hours. NIOSH REL (United States, 1/2013). CEIL: 1800 mg/m ³ 15 minutes. CEIL: 610 ppm 15 minutes. TWA: 350 mg/m ³ 10 hours. TWA: 120 ppm 10 hours. OSHA PEL (United States, 6/2010).
Date of issue/Date of revision	: 7/21/2015.	Date of previous issue	: No previous validation. Version : 0.01 4/12

Section 8. Exposure controls/personal protection

	TWA: 2950 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). STEL: 2250 mg/m ³ 15 minutes. STEL: 750 ppm 15 minutes. TWA: 1800 mg/m ³ 8 hours. TWA: 600 ppm 8 hours.
Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measu	ires
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
Body protection	: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.
Other skin protection	: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance		
Physical state	Gas.	
Color	Not available.	
Melting/freezing point	-138°C (-216.4°F) This is based on data for the following ingredient: Butane. Weighted average: -192.3°C (-314.1°F)	
Critical temperature	Lowest known value: -146.95°C (-232.5°F) (nitrogen).	
Odor	Not available.	
Odor threshold	Not available.	
рН	Not available.	
Flash point	Not available.	
Burning time	Not applicable.	
Burning rate	Not applicable.	
Evaporation rate	Not available.	
Flammability (solid, gas)	Not available.	
Lower and upper explosive (flammable) limits	Not available.	
Vapor pressure	Not available.	
Vapor density	Highest known value: 2.1 (Air = 1) (Butane). Weighted average: 1.07 (Air = 1)	
Gas Density (lb/ft ³)	Weighted average: 0.11	
Relative density	Not applicable.	
Solubility	Not available.	
Solubility in water	Not available.	
Partition coefficient: n- octanol/water	Not available.	
Auto-ignition temperature	Not available.	
Decomposition temperature	Not available.	
SADT	Not available.	
Viscosity	Not applicable.	

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.				
Chemical stability	: The product is stable.				
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.				
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.				
Incompatibility with various substances	: Extremely reactive or incompatible with the following materials: oxidizing materials.				
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.				
Date of issue/Date of revision	: 7/21/2015. Date of previous issue : No previous validation. Version : 0.01 6/12				

Section 10. Stability and reactivity

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	uct/ingredient name Result		Dose	Exposure
pentane	LC50 Inhalation Vapor	Rat	364 g/m³	4 hours

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
pentane	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure	: Not available.				
Potential acute health effect	<u>ots</u>				
Eye contact	: Contact with rapidly expanding gas may cause burns or frostbite.				
Inhalation	: Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.				
Skin contact	: Contact with rapidly expanding gas may cause burns or frostbite.				
Ingestion : As this product is a gas, refer to the inhalation section.					
Symptoms related to the pl	hysical, chemical and toxicological characteristics				
Eye contact	: No specific data.				
Inhalation	: No specific data.				
Skin contact	: No specific data.				
Date of issue/Date of revision	: 7/21/2015. Date of previous issue : No previous validation. Version : 0.01 7/12				

Section 11. Toxicological information

Ingestion

: No specific data.

Delayed and immediate effec	ts and also chronic effects from short and long term exposure
<u>Short term exposure</u>	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Long term exposure	
Potential immediate effects	: Not available.
Potential delayed effects	: Not available.
Potential chronic health eff	ects
Not available.	
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
pentane	3.45	171	low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

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Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	ΙΑΤΑ
UN number	UN1954	UN1954	UN1954	UN1954	UN1954
UN proper shipping name	COMPRESSED GAS, FLAMMABLE, N.O.S. (methane, propane)	COMPRESSED GAS, FLAMMABLE, N.O.S. (methane, propane)	COMPRESSED GAS, FLAMMABLE, N.O.S. (methane, propane)	COMPRESSED GAS, FLAMMABLE, N.O.S. (methane, propane)	COMPRESSED GAS, FLAMMABLE, N.O.S. (methane, propane)
Transport hazard class(es)	2.1	2.1	2.1	2.1	2.1
Packing group	-	-	-	-	-
Environment	No.	No.	No.	No.	No.
Additional information	-	Explosive Limit and Limited Quantity Index 0.125 ERAP Index 3000 Passenger Carrying Ship Index Forbidden Passenger Carrying Road or Rail Index Forbidden	-	-	-

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

•		•						
U.S. Federal regulations	:	TSCA 8	(a) PAIR: pen	tane				
		TSCA 8	(a) CDR Exer	npt/Parti	al exemption:	Not determin	ned	
		United \$	States invent	ory (TSC	A 8b): All com	ponents are l	isted or exemp	ted.
			ir Act (CAA) ; Isobutane; E	•	lated flammal	ble substanc	es : methane; e	ethane;
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	:	Not liste	d					
Clean Air Act Section 602 Class I Substances	:	Not liste	d					
Clean Air Act Section 602 Class II Substances	:	Not liste	d					
DEA List I Chemicals (Precursor Chemicals)	:	Not liste	d					
DEA List II Chemicals (Essential Chemicals)	:	Not liste	d					
<u>SARA 302/304</u>								
Composition/information	on	<u>ingredie</u>	<u>nts</u>					
No products were found.								
SARA 304 RQ	:	Not app	licable.					
<u>SARA 311/312</u>								
Classification	:	Fire haz Sudden	ard release of pre	essure				
Composition/information	on	<u>ingredie</u>	<u>nts</u>					
Name			%	Fire	Sudden	Reactive	Immediate	Delayed

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
pentane	0.0001 - 0. 9999	Yes.	No.	No.	Yes.	No.

State regulations						
Massachusetts	The following components are listed: METHANE; NITROGEN; ETHANE; PROPANE; ISOBUTANE; BUTANE					
New York	: None of the components are listed.					
New Jersey	 The following components are listed: METHANE; NITROGEN; ETHANE; PROPANE; Isobutane; PROPANE, 2-METHYL-; BUTANE 					
Pennsylvania	The following components are listed: METHANE; NITROGEN; ETHANE; PROPANE; PROPANE; PROPANE, 2-METHYL-; BUTANE					
Canada inventory	: All components are listed or exempted.					
International regulations						
International lists	 Australia inventory (AICS): All components are listed or exempted. China inventory (IECSC): All components are listed or exempted. Japan inventory: Not determined. Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted. Philippines inventory (PICCS): All components are listed or exempted. Taiwan inventory (CSNN): Not determined. 					
Date of issue/Date of revision	: 7/21/2015. Date of previous issue : No previous validation. Version : 0.01 10/12					

Section 15. Regulatory information

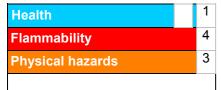
-	
Chemical Weapons Convention List Schedule I Chemicals	: Not listed
Chemical Weapons Convention List Schedule II Chemicals	: Not listed
Chemical Weapons Convention List Schedule III Chemicals	: Not listed
<u>Canada</u>	
WHMIS (Canada)	: Class A: Compressed gas. Class B-1: Flammable gas.
	CEPA Toxic substances : The following components are listed: Methane; Volatile organic compounds Canadian ARET : None of the components are listed.
	Canadian NPRI : The following components are listed: Volatile organic compounds; Volatile organic compounds; Propane; Butane (all isomers); Butane (all isomers) Alberta Designated Substances : None of the components are listed.
	Ontario Designated Substances: None of the components are listed. Quebec Designated Substances: None of the components are listed.

Section 16. Other information

Canada Label requirements : Class A: Compressed gas.

Class B-1: Flammable gas.

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

<u>History</u>	
Date of printing	: 7/21/2015.
Date of issue/Date of revision	: 7/21/2015.
Date of previous issue	: No previous validation.
Version	: 0.01
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United NationsACGIH – American Conference of Governmental Industrial Hygienists AIHA – American Industrial Hygiene Association CAS – Chemical Abstract Services CEPA – Canadian Environmental Protection Act CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act (EPA) CFR – United States Code of Federal Regulations CPR – Controlled Products Regulations DSL – Domestic Substances List GWP – Global Warming Potential IARC – International Agency for Research on Cancer ICAO – International Agency for Research on Cancer ICAO – International Civil Aviation Organisation Inh – Inhalation LC – Lethal concentration LD – Lethal dosage NDSL – Non-Domestic Substances List NIOSH – National Institute for Occupational Safety and Health TDG – Canadian Transportation of Dangerous Goods Act and Regulations TLV – Threshold Limit Value TSCA – Toxic Substances Control Act WEEL – Workplace Environmental Exposure Level WHMIS – Canadian Workplace Hazardous Material Information System
References	: Not available.
VIndicators information the	at has abanged from providually issued version

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.