

Safety Data Sheet

1. Identification

Product Identifier: Pentane

Other Means of Identification: C5, C5 plus, pentanes, pentane mixture

Product use: Solvent, diluent, fuel

Restrictions on use: Do not use for purposes other than those listed above

Manufacturer: Keyera and Affiliates




Address: Suite 200, The Ampersand, West Tower
144 – 4th Avenue SW
Calgary, AB, T2P 3N4

Main Phone Number: (403) 205-8300 / 1 (888) 699-4853 (Mon. - Fri. 8 AM - 5 PM)

Transportation Emergencies Only: CANUTEC (CAN) Ph:1-888-CAN-UTEC(226-8832) Cell*666 (24 hr)
CHEMTREC (US) Ph: 1-800-424-9300 (24 hr)

2. Hazards Identification

GHS Hazards

Pictogram	Classification	Hazard Statements
	Flammable Liquids – Category 1	Extremely flammable liquid and vapor.
	Acute Toxicity, Oral – Category 4 Specific Target Organ Toxicity, Single Exposure – Category 3 Skin corrosion/irritation – Category 2 Eye damage/irritation – Category 2A Specific Target Organ Toxicity, Repeated Exposure – Cat 1	Harmful if swallowed. May cause drowsiness or dizziness. May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation. Causes damage to nervous system through prolonged or repeated exposure.
	Aspiration hazard – Category 1 Carcinogenicity – Category 1A Toxic to reproduction – Category 2	May be fatal if swallowed and enters airways. May cause cancer. Suspected of damaging fertility or the unborn child.
No pictogram	Other hazards	Repeated exposure may cause skin dryness and cracking.

Signal Word: Danger

Precautionary Statements:

Prevention

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources – No smoking.
- Keep container tightly closed.
- Ground and bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.

- Avoid breathing gas/vapors.
- Wash hands thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- Do not eat, drink or smoke when using this product.
- Use only outdoors or in a well-ventilated area.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.

Response

- In case of fire: Use dry chemical, carbon dioxide, water fog or foam to extinguish.

- If inhaled: Remove person to fresh air and keep comfortable for breathing.
- Get medical advice/attention if you feel unwell.

- If on skin (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower.
- If skin irritation occurs: Get medical advice/attention.
- If exposed or concerned: Call a physician/doctor.

- If in eyes: Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

- If swallowed: Immediately call a doctor. Do not induce vomiting.
- Rinse mouth.

Storage

- Store in a well-ventilated place. Keep cool.
- Keep container tightly closed.
- Store locked up.

Disposal

- Dispose of contents/container in accordance with applicable local, provincial/state, and federal regulations.

3. Composition/Information on Ingredients

Chemical Name: Pentane
Common Name/Synonyms: C5, C5 plus, pentanes, pentane mixture

Ingredient Name	Weight %	CAS No.
iso-Butane	0 – 0.5	75-28-5
n-Butane	0 – 18.0	106-97-8
iso-Pentane	60 – 80	78-78-4
n-Pentane	10 – 20	109-66-0
Neopentane	10 - 20	463-82-1
n-Hexane	0 – 1.5	110-54-3
Heptanes Plus (C7 +)	0.1 – 5.0	
Benzene	0 – 0.2	71-43-2
Xylene (mixed isomers)	0 – 0.2	1330-20-7

4. First Aid Measures

Immediate Medical Attention and Special Treatment:
 Treat symptomatically and supportively. Refer also to Table below.

First Aid:	
Inhalation:	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin:	Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water/shower. If skin irritation occurs: get medical advice/attention.
Eyes:	Rinse cautiously with water for several minutes. Remove contact lens, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice/attention.
Ingestion:	Rinse mouth. Extreme care must be used to prevent aspiration. Do not induce vomiting. Immediately call a doctor. Note to Physician: Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid, which can cause pneumonitis.

Most Important Effects and Symptoms, Acute or Delayed:

An aspiration hazard: may enter directly into the lungs if swallowed or when vomiting the substance.
 Benzene, one of the component, may cause cancer (leukemia) through skin exposure.
 n-Hexane, one of the component, is suspected to cause damage to fertility and the unborn child.

Exposure Route	Health Effects	Symptoms of Exposure
Inhalation:	May cause respiratory irritation and affect the nervous system and the Central Nervous System CNS.	Coughing, itchy throat, dizziness, drowsiness.
Skin:	Causes irritation. Prolonged or frequently repeated contact may cause the defatting of skin. See also exposure (skin) to benzene being carcinogen.	Itchiness, redness. Prolonged or repeated exposure causes dryness and skin cracking.
Eyes:	slightly irritating to the eyes and could cause prolonged (days) impairment of your vision. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.	Pain, tears, swelling, redness, and blurred vision. Eye contact with the vapors, fumes or spray mist from this substance could also cause similar signs and symptoms.
Ingestion:	Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.	Signs and symptoms of aspiration may include coughing, difficulty breathing, “gurgling” lung sounds when breathing, coughing up phlegm (sputum) that is yellow or green in color or bad smelling, change in voice (hoarseness), skin turning bluish due to lack of oxygen.

5. Fire Fighting Measures

<p>Flammability: Yes. Extremely flammable liquid and vapor.</p>	<p>Hazardous Combustion Products: Carbon monoxide (CO), carbon dioxide (CO₂), and acrid smoke.</p>
<p>Explosion: Sensitive to impact: No</p>	<p>Sensitive to static discharge: Yes</p>
<p>Extinguishing Media: Small Fire: dry chemical or CO₂. Large Fire: water spray or fog.</p>	
<p>Unsuitable Extinguishing Media:</p> <ul style="list-style-type: none"> • Foam. • Water jet: Do not use straight streams. Water may be ineffective because it may not cool the material below the flashpoint 	
<p>Special Protective Equipment for Firefighters:</p> <ul style="list-style-type: none"> • Wear full protective clothing and Self-Contained Breathing Apparatus SCBA with full face-piece. • Structural firefighters' protective clothing will only provide limited protection. 	
<p>Precautions for Firefighters:</p> <ul style="list-style-type: none"> • If tank, rail car or tank truck is involved in a fire, ISOLATE and consider initial evacuation <u>in all directions</u> for 800 meters (½ mile). • Move container from fire area if you can do it without risk. • Cool fire-exposed containers with flooding quantities of water applied from as far a distance as possible, until well after fire is out. • Stay away from tanks engulfed in fire. • Containers exposed to fire may explode or vent through pressure-relief devices. • For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. • Refer to Guide 128 of the Emergency Response Guidebook (Transport Canada/US Dept. of Transportation). 	
<p>Unusual Fire and Explosion Hazards:</p> <ul style="list-style-type: none"> • Due to low electroconductivity of the substance, liquid can accumulate or generate static charge by flow or agitation. Vapors can be ignited by static discharge. • The highly flammable vapors are heavier than air and may accumulate in low areas and /or spread along ground to distant ignition sources and flash back. • The product is not soluble in (and floats on top of) water. Using water as an extinguishment may spread the fire rapidly. • Can release vapors that form explosive mixtures with air. • Vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back to a leak or open container. 	

6. Accidental Release Measures

Protective Equipment:

Gloves:	Recommended: neoprene and nitrile; insulating gloves (for liquefied gas). Not recommended: polyvinyl chloride PVC.
Clothing:	Flame-retardant coverall e.g. Nomex, Proban. Protective apron and trousers worn over coveralls for handling NGL.
Respirator:	NIOSH Approved Supplied-Air Respirator or SCBA where large quantities are released, and the exposure level is unknown or where an oxygen-deficient atmosphere may exist.
Eye:	Safety glasses with side shields, safety goggles or face shields.

Precautions:

- Do not breathe vapors.
- The highly flammable vapors are heavier than air and may accumulate in low areas and /or spread along ground to distant ignition sources and flash back.
- Ventilate closed spaces before entering.

Emergency Procedures:

- Shut off leak source, if it can be done safely.
- Remove all sources of ignition.
- Isolate hazard area.
- Evacuate area of all unnecessary personnel.
Small spill: will evaporate.
Large spill: consider downwind evacuation of at least 300 meters (1000 feet)
If tank, rail car or tank truck is involved in a fire, ISOLATE and consider initial evacuation in all directions for 800 meters (½ mile).
- Keep unnecessary and unprotected personnel from entering.
- Emergency personnel must wear appropriate personal protective equipment.
- Ventilate area of leak or spill.

Containment and Clean-up:

- Use non-sparking tools and equipment.
- All equipment used when handling the product must be grounded and transfer of the product bonded.
- Contain and recover liquid if it can be done safely: Collect spillage with an inert material (e.g., vermiculite, dry sand, earth), and place in metal container which can be grounded.
- Do not use combustible materials, such as sawdust, as absorbent.
- If a leak or spill has not ignited, use water spray to disperse the vapors or divert vapor cloud draft. Do not direct water at spill or source of leak.
- Prevent liquid from spreading to sewers, ventilation systems, confined spaces.
- Dispose of contents/container in accordance with applicable local, provincial/state, and federal regulations.
- Refer to Guide 128 of the Emergency Response Guidebook (Transport Canada/US Dept. of Transportation).

7. Handling and Storage

Handling Precautions :

- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces – No smoking.
- Keep container tightly closed.
- Avoid breathing gas/vapors.
- Use only non-sparking tools.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Ground/bond containers when transferring this product.
- Take precautionary measures against static discharges.
- Do not eat, drink or smoke when using this product.
- Wear protective gloves/ protective clothing/ eye protection/ face protection.

Storage Precautions:

Locations

- Store in a cool, dry, well-ventilated location, away from any area of fire-hazard.
- Outside or detached storage is preferred.
- Storage and use areas should be No Smoking areas.
- Store locked-up.

Containers

- Keep container tightly closed.
- Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, sparks, flame, static electricity or other sources of ignition: they may explode and cause injury or death.

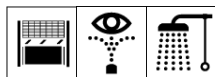
Other precautions

- Separate from incompatibles like oxidizers e.g. chlorine gas and oxygen.

8. Exposure Controls / Personal Protection

EXPOSURE LIMITS

	Authority	15 MINS STEL or Ceiling	8-HOURS
Butane (all isomers)	Alberta	-	1000 ppm (2370 mg/m ³)
	Ontario	-	800 ppm (1900 mg/m ³)
	BC	750 ppm (1778 mg/m ³)	600 ppm (1422 mg/m ³)
Pentane (all isomers)	Alberta, Ontario	-	600 ppm (1770 mg/m ³)
	BC	-	600 ppm
n-Hexane (CAS 110-54-3)	Alberta	-	50 ppm (176 mg/m ³)
	BC	-	20 ppm (skin)
	Ontario	-	50 ppm (skin)
Benzene (CAS 71-43-2)	Alberta	2.5 ppm (8 mg/m ³) – skin	0.5 ppm (1.6 mg/m ³) – skin
	Ontario, BC	2.5 ppm – skin	0.5 ppm – skin
Xylene (o-,m-,p- isomers) (CAS 1330-20-7)	Alberta	150 ppm (651 mg/m ³)	100 ppm (434 mg/m ³)
	Ontario, BC	150 ppm	100 ppm



ENGINEERING CONTROLS

- Ventilate area where product is used, stored and/or handled to maintain airborne concentrations below the LEL and OEL, especially in confined spaces.
- Exhaust/ventilate to the outside.
- Supply sufficient replacement air to replace air removed by exhaust systems.
- Ventilation equipment must be explosion proof.
- Ventilation system should be grounded and separate from other exhaust ventilation systems. Adequate make-up air must be provided.
- Emergency eyewash fountain and safety shower must be located in the immediate work area

PERSONAL PROTECTIVE EQUIPMENT



- Gloves:** Recommended: neoprene and nitrile;
Not recommended: polyvinyl chloride PVC.
- Clothing:** Flame-retardant coverall e.g. Nomex, Proban.
Impervious protective clothing to prevent repeated or prolonged skin contact.
Keep contaminated clothing in closed containers.
- Respirator:** NIOSH Approved Supplied-Air Respirator or SCBA where large concentration is anticipated, and the exposure level is unknown or where an oxygen-deficient atmosphere may exist.
- Eye:** Safety glasses with side shields, safety goggles or face shields.

9. Physical and Chemical Properties

Chemical Formula: C ₅ H ₁₂	Molecular Weight: 74.13-77.56	Chemical Family: Hydrocarbon, Aliphatic
Appearance: Colorless and very volatile liquid	Odor: Slight gasoline odor	Odor Threshold: Not available
pH: Not applicable	Melting/Freezing Point: -130-160°C	Boiling Point: ~ 22-30°C (71.6-86°F)
Boiling Range: Not available	Vapor Density: 2.5 (air=1)	Specific Gravity: 0.62 at 20C
Flash Point: <-40°C (<-40°F) Open Cup	Flammability: Yes	Evaporation Rate: 28.6 (butyl acetate = 1)
Upper-Lower Explosive Limit: 1.5% (LEL), 7.8% (UEL)	Vapor Pressure: ~ 120-140 kPa at 20°C	Percent Volatile: 100 by volume
Soluble in water (@20°C): Slightly soluble	Others: Soluble in organic solvents such as alcohol, ether, chloroform	
Partition Coefficient n-octanol/water: ~3.2-3.4	Auto-Ignition Temperature: 420°C (isopentane)	Decomposition Temp.: Not available
Viscosity: 0.37-0.38 cSt @10°C	Henry's Law Constant: Not available	Isobaric Heat Capacity: Not available

10. Stability and Reactivity

<p>Reactivity: Avoid incompatible materials: may react violently with oxidizers. Avoid heat, sparks, open flames and other sources of ignition. Conditions to avoid: Static discharge, friction. Use only in well ventilated areas.</p>
<p>Chemical Stability: Stable under normal temperatures and pressures.</p>
<p>Possibility of Hazardous Reactions: Polymerization has not been reported to occur under normal temperature and pressure conditions.</p>
<p>Conditions to Avoid: Extreme temperatures and incompatible materials.</p>
<p>Incompatible Materials:</p> <ul style="list-style-type: none"> • <u>Oxidizers</u>: may react violently with oxidizers such as chlorates, nitrates, peroxides, etc.
<p>Hazardous Decomposition Products:</p> <ul style="list-style-type: none"> • No decomposition if stored and applied as directed. • Combustion forms carbon monoxide, carbon dioxide, irritating and toxic fumes/gases.

11. Toxicological Information

Exposure Route	Acute Health Effects	Symptoms of Exposure
Inhalation:	<p>May cause respiratory irritation and affect the nervous system and the Central Nervous System CNS.</p> <p>See also effects of benzene and n-hexane under chronic exposure.</p>	Coughing, itchy throat, dizziness, drowsiness.
Skin:	<p>Causes irritation.</p> <p>See also effects of benzene and n-hexane under chronic exposure.</p>	Itchiness, redness.
Eye:	<p>slightly irritating to the eyes and could cause prolonged (days) impairment of your vision.</p> <p>The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.</p>	Pain, tears, swelling, redness, and blurred vision. Eye contact with the vapors, fumes or spray mist from this substance could also cause similar signs and symptoms.
Ingestion:	<p>Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death.</p>	Signs and symptoms of aspiration may include coughing, difficulty breathing, “gurgling” lung sounds when breathing, coughing up phlegm (sputum) that is yellow or green in color or bad smelling, change in voice (hoarseness), skin turning bluish due to lack of oxygen.

Chronic Exposure:

Inhalation:

Repeated or prolonged exposure cause damage to the central nervous system (CNS), and the nervous system.

Benzene may cause cancer (leukemia).

n-Hexane may be toxic to the reproductive system.

Skin:

Not known to be a skin-sensitizer. Chronic exposure may cause skin dryness and cracking.

Benzene may cause cancer (leukemia).

n-Hexane may be toxic to the reproductive system.

Medical Conditions Aggravated by Exposure:

Possibly asthma.

Sensitization: No	Reproductive Toxicology: Yes (n-hexane component) Suspected of damaging fertility or the unborn child.	Teratogenicity: No	Mutagenicity: No	Irritancy: Yes
Carcinogenicity: Yes: benzene ACGIH: A1 – confirmed human carcinogen IARC: Group 1 – carcinogenic to human NIOSH: potential occupational carcinogen NTP: Known human carcinogen		Target Organs: Single exposure: eye, skin, respiratory system. Repeated exposure: CNS, nervous system, reproductive system.		

Lethality Tests:

Chemical Name	CAS No.	LD50	LC50
Isobutane	75-28-5	Not available	Rat, inhalation: 658 mg/L 4 hr Rat, inhalation: 570,000 ppm 15 mins Mouse, inhalation: 52 mg/L 1 hr
n-Butane	106-97-8	Not available	Rat, inhalation: 658 mg/L 4 hr Mouse, inhalation: 680 mg/L 2 hr
iso-Pentane	78-78-4	Not available	Rat, inhalation: 280 g/m ³ 4 hr
n-Pentane	109-66-0	Rabbit, dermal: 3000 mg/kg Mouse, oral: 5000 mg/kg	Rat, inhalation: 364 mg/L 4hr
Neopentane	463-82-1	Not available	Not available
n-Hexane	110-54-3	Adult rats 29700 mg/kg	Rat & Mice, inhalation: 48000 ppm 4 hr
Benzene	71-43-2	Rabbit, dermal:>8200 mg/kg Rat, oral: 810 mg/kg	Rat, inhalation: 44.66 mg/L 4 hr
Xylene (o-,m-,p-Isomers)	1330-20-7	Rabbit, dermal: >4350 mg/kg Rat, oral: 3500 mg/kg	Rat, inhalation, vapor: 29.08 mg/L 4 hr

12. Ecological Information

<p>Persistence & Degradability: Both n-pentane and isopentane are biodegradable.</p>	<p>Bioaccumulative Potential: No.</p>
<p>Mobility: No data available.</p>	<p>Other Adverse Effects: See below.</p>

Terrestrial Fate:

- Photolysis and hydrolysis are not expected to be important in soil.
- Not expected to bioaccumulate.
- The lighter, volatile butanes will evaporate leaving heavier components behind. Both n-pentane and isopentane will undergo biodegradation in the soil.
- Spills may contaminate groundwater depending on the level of groundwater table and local geology.

Aquatic Fate:

- Spills will spread on the water surface and the majority from C2-C5 will evaporate. The heavier components C6, C7+ being only slightly soluble in water and with specific gravity <1, will remain/float on the water surface.
- Hydrolysis is not expected to be an important environmental fate process since the alkanes lack functional groups that hydrolyze under environmental conditions.
- Isopentane, n-pentane, and neopentane have been identified as hazardous to the aquatic environment under GHS (Globally Harmonized System): Chronic Hazard category 2, as toxic to aquatic life with long-lasting effects.

Atmospheric Fate:

- If released to air, butanes (n-butane and isobutane) will exist solely as gas in the atmosphere.
- The Volatile Organic Compound (VOC) components such as butanes and pentanes have the potential to partake in photochemical reactions to produce ozone pollutant.

Eco Toxicity Tests:

Chemical Name	CAS No.		
n-Pentane	109-66-0	Fish	Oncorhynchus mykiss LC50: 9.87 mg/L 96 hr. Pimephales promelas LC50: 11.59 mg/L 96 hrs. Lepomis macrochirus LC50: 9.99 mg/L 96 hrs.
		Invertebrate	Daphnia magna EC50: 9.74 mg/L 48 hrs.
iso-Pentane	78-78-4	Invertebrate	Daphnia magna EC50: 2.3 mg/L 48 hrs.
Benzene	71-43-2	Fish	Oncorhynchus mykiss LC50: 5.3 mg/L 96 hr. flow-through
			Pimephales promelas LC50: 10.7-14.7 mg/L 96 hrs. flow-through
		Lepomis macrochirus LC50: 22.4 mg/L 96 hrs. static Lepomis macrochirus LC50: 70000-142000 ug/L 96 hrs. static Precilla reticulata LC50: 28.6 mg/L 96 hrs. static	
		Algae	Pseudokirchneriella subcapitata EC50: 29 mg/L 72 hrs.
		Invertebrate	Daphnia magna EC50: 8.76-15.6 mg/L 48 hrs. static Daphnia magna EC50: 10 mg/L 48 hrs.
Xylene (o-,m-,p-Isomers)	1330-20-7	Fish	Oncorhynchus mykiss LC50: 13.5-17.3 mg/L 96 hr. Oncorhynchus mykiss LC50: 2.661-4.093 mg/L 96 hr. static
			Pimephales promelas LC50: 13.4 mg/L 96 hrs. flow-through Pimephales promelas LC50: 23.53-29.97 mg/L 96 hrs. static
			Lepomis macrochirus LC50: 13.1-16.5 mg/L 96 hrs. flow-through Lepomis macrochirus LC50: 19 mg/L 96 hrs. Lepomis macrochirus LC50: 7.711-9.591 mg/L 96 hrs. static
			Cyprinus carpio LC50: 780 mg/L 96 hrs. semi-static Cyprinus carpio LC50: >780 mg/L 96 hrs.
			Precilla reticulata LC50: 30.26-40.75 mg/L 96 hrs. static
		Invertebrate	Water flea EC50: 3.82 mg/L 48 hrs. Gammarus lacustris LC50: 0.6 mg/L 48 hrs.

13. Disposal Considerations

Waste Disposal:

- Dispose of waste material at an approved waste treatment/disposal facility in accordance with applicable local, provincial, and federal regulations.
- Excess/waste pentane can be disposed by incineration in an incinerator or flare.
- Pentane can be reused as solvent or for fuel-blending.

14. Transport Information

TDG (CANADA) CLASSIFICATION

PROPER SHIPPING NAME: Pentanes, Liquid

CLASS: 3

UN NUMBER: UN1265

PACKING GROUP: I

LABEL/PLACARD:

SPECIAL PROVISION: None



MARINE POLLUTANT: No

15. Regulatory Information

CANADA

	iButane	nButane	iPentane	nPentane	neoPentane	nHexane	Benzene	Xylenes
CAS	75-28-5	106-97-8	78-78-4	109-66-0	463-82-1	110-54-3	71-43-2	1330-20-7
DSL	yes	yes	yes	yes	yes	yes	yes	yes
NPRI	yes	yes	yes	yes	yes	yes	yes	yes
E2	yes	yes	yes	yes	yes	no	yes	yes

16. Other Information

Prepared for: Keyera Health and Safety
Issue Date/ Revision No: August 17, 2021/ Revision #10

Revisions:	Dates:	Main Changes:
• Original:	December 12, 1996	
• 1 st - 5 th revision:	July 16, 2005 – July 1, 2012	Minor changes
• 6 th revision:	November 15, 2013	Alberta Envirofuels to Keyera AEF Facility
• 7 th revision:	July 31, 2015	GHS/WHMIS-2015 format
• 8 th revision:	August 31, 2015	Changed emergency contact number
• 9 th revision:	September 28, 2017	Updated Sec. 3 and Sec. 9
• 10 th revision:	August 17, 2021	Updated phone numbers and address

Glossary

ACGIH – American Conference of Governmental Industrial Hygiene
DOT – US Department of Transportation
DSL – Domestic Substance List (Canada)
E2 – Environmental Emergencies (Canada)
GHS – Globally Harmonized System
IARC – International Agency for Research on Cancer
IDLH – Immediately Dangerous to Life and Health
NIOSH – National Institute for Occupational Safety & Health
NPRI – National Pollutant Release Inventory (Canada)
NTP – National Toxicology Program
OSHA – Occupational Safety & Health Administration of the US Dept of Labour
PEL – Permissible Exposure Limit
SARA – Superfund Amendments and Reauthorization Act of 1986
STEL – Short Term Exposure Limit
TRI – US Toxic Release Inventory
TSCA – Toxic Substance Control Act
TWA – Time Weighed Average

Disclaimer of Expressed and Implied Warranties

The information presented in the Safety Data Sheet is based on data believed to be accurate as of the date this Safety Data Sheet was prepared. However, neither Keyera nor its affiliates assumes any liability whatsoever for the accuracy or completeness of the information contained herein. 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 they assume the risk of their use.

~ End of Safety Data Sheet ~