

EXTRACTING SOLUTIONS FOR SUCCESS

# XTRACTOR SAFETY DATA SHEET

N-Pentane

### Section 1. Identification

**GHS** product identifier Chemical name Other means of identification

**Product use** 

**Synonym** 

: N-Pentane : pentane

: n-PENTANE

: Synthetic/Analytical chemistry. : n-PENTANE

Supplier's details

: 855 Washington Blvd Montebello, CA 90640

888-733-2712

### 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 substance or mixture : FLAMMABLE LIQUIDS - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

AQUATIC HAZARD (LONG-TERM) - Category 1

**GHS** label elements

**Hazard pictograms** 







Signal word

Danger

**Hazard statements** 

: Highly flammable liquid and vapor. May form explosive mixtures with air. May cause drowsiness and dizziness.

Very toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**General** 

: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

**Prevention** 

: Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Avoid breathing vapor. Use and store only outdoors or in a well ventilated place.

Response

: Collect spillage. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

Date of issue/Date of revision

: 4/01/2018

N-Pentane

### Section 2. Hazards identification

**Storage** 

: Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and

international regulations.

**Hazards not otherwise** 

classified

: None known.

### Section 3. Composition/information on ingredients

Substance/mixture : Substance
Chemical name : pentane
Other means of : n-PENTANE
identification

**CAS** number/other identifiers

CAS number : 109-66-0
Product code : PEN99

Ingredient name	%	CAS number
pentane	100	109-66-0

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 necessary 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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. 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.

# Most important symptoms/effects, acute and delayed Potential acute health effects

Date of issue/Date of revision : 4/01/2018 2/13

### Section 4. First aid measures

**Eye contact** : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and

dizziness.

**Skin contact**: No known significant effects or critical hazards.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

ingestion : Can cause central nervous system (CNS) depression.

#### Over-exposure signs/symptoms

**Eye contact** : No specific data.

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness No specific data.

Skin contact : No specific data.

Ingestion : No specific data.

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** 

media

: Do not use water jet.

# Specific hazards arising from the chemical

: Highly flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

# Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide

# 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Date of issue/Date of revision : 4/01/2018 3/13

# Section 5. Fire-fighting measures

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

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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 nonemergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### Methods and materials for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Date of issue/Date of revision : 4/01/2018

# Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

#### **Control parameters**

#### Occupational exposure limits

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/m³ 15 minutes.  CEIL: 610 ppm 15 minutes.  TWA: 350 mg/m³ 10 hours.  TWA: 120 ppm 10 hours.  OSHA PEL (United States, 6/2010).  TWA: 2950 mg/m³ 8 hours.  TWA: 1000 ppm 8 hours.  OSHA PEL 1989 (United States, 3/1989).  STEL: 2250 mg/m³ 15 minutes.  STEL: 750 ppm 15 minutes.  TWA: 1800 mg/m³ 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 measures**

#### **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 sideshields.

#### Skin protection

Date of issue/Date of revision : 4/01/2018 5/13

# Section 8. Exposure controls/personal 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 antistatic 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 : Liquid. [COLORLESS LIQUID WITH A GASOLINE-LIKE ODOR [NOTE: A GAS ABOVE

97 F. MAY BE UTILIZED AS A FUEL.]]

Color : Colorless.

Molecular weight : 72.15 g/mole

Molecular formula : C5-H12

Boiling/condensation point : 36.06°C (96.9°F)

Melting/freezing point : -129.67°C (-201.4°F)

Critical temperature : 196.55°C (385.8°F)

Odor : Characteristic.
Odor threshold : Not available.
pH : Not available.

Flash point : Closed cup: <-40°C (<-40°F)

Burning time : Not applicable.
Burning rate : Not applicable.

**Evaporation rate** : 10.46 (butyl acetate = 1)

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 1.5% Upper: 7.8%

Vapor pressure : 59 kPa (442.836191335 mm Hg) [room temperature]

Vapor density : 2.5 (Air = 1) Specific Volume (ft 3/lb) : 4.9628

**Gas Density (lb/ft** 3) : 0.2015 (20°C / 68 to °F)

Relative density : 0.63

Solubility : Not available.

Solubility in water : 0.0385 g/l

Partition coefficient: n- : 3.45

octanol/water

Date of issue/Date of revision : 4/01/2018 6/13

N-Pentane

# Section 9. Physical and chemical properties

Auto-ignition temperature : 260°C (500°F)

Decomposition temperature : Not available.

SADT : Not available.

Viscosity : Dynamic (room temperature): 0.224 mPa·s (0.224 cP)

## 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. Do not

allow vapor to accumulate in low or confined areas.

Hazardous decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

**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	Result	Species	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)

Date of issue/Date of revision : 4/01/2018 7/13

N-Pentane

# Section 11. Toxicological information

Name	Category	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 effects

**Eve contact** : No known significant effects or critical hazards.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness and

dizziness.

**Skin contact** : No known significant effects or critical hazards.

Ingestion : Can cause central nervous system (CNS) depression.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : No specific data.

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact** : No specific data. Ingestion : No specific data.

### Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

**Long term exposure** 

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

#### Potential chronic health effects

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.

Date of issue/Date of revision : 4/01/2018 8/13

# Section 11. Toxicological information

#### **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.

### 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. 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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### **Section 14. Transport information**

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1265	UN1265	UN1265	UN1265	UN1265
UN proper shipping name	PENTANES	PENTANES	PENTANES	PENTANES	PENTANES

Date of issue/Date of revision : 4/01/2018 9/13

# Section 14. Transport information

Transport hazard class(es)	3	3	3	3	3
Packing group	I	I	I	I	I
Environment	No.	No.	No.	Yes.	No.
Additional information	-	Explosive Limit and Limited Quantity Index  1  Passenger Carrying Ship Index Forbidden  Passenger Carrying Road or Rail Index  5	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.

<sup>&</sup>quot;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: pentane

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

TSCA 12(b) one-time export: pentane

United States inventory (TSCA 8b): This material is listed or exempted. Clean Air Act (CAA) 112 regulated flammable substances: pentane

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)**  : Not listed

Clean Air Act Section 602

**Class I Substances** 

: Not listed

Clean Air Act Section 602

**Class II Substances** 

: Not listed

**DEA List I Chemicals** 

(Precursor Chemicals)

: Not listed

**DEA List II Chemicals** (Essential Chemicals) : Not listed

#### **SARA 302/304**

**Composition/information on ingredients** 

No products were found.

**SARA 304 RQ** : Not applicable.

Date of issue/Date of revision : 4/01/2018 10/13

# Section 15. Regulatory information

#### **SARA 311/312**

Classification : Fire hazard

Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure		(acute) health	Delayed (chronic) health hazard
pentane	100	Yes.	No.	No.	Yes.	No.

State regulations

**Massachusetts** : This material is listed. **New York** : This material is not listed. **New Jersey** : This material is listed. Pennsylvania : This material is listed.

**Canada inventory** : This material is listed or exempted.

**International regulations** 

International lists : Australia inventory (AICS): This material is listed or exempted.

China inventory (IECSC): This material is listed or exempted.

Japan inventory: This material is listed or exempted. **Korea inventory**: This material is listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): This material is listed or exempted.

Philippines inventory (PICCS): This material is listed or exempted.

Taiwan inventory (CSNN): Not determined.

**Chemical Weapons** 

**Convention List Schedule** 

**I Chemicals** 

**Chemical Weapons** 

**Convention List Schedule** 

**II Chemicals** 

**Chemical Weapons** 

**Convention List Schedule** 

**III Chemicals** 

Canada

: Not listed

: Not listed

: Not listed

WHMIS (Canada) : Class B-2: Flammable liquid

CEPA Toxic substances: This material is not listed.

Canadian ARET: This material is not listed. Canadian NPRI: This material is listed.

Alberta Designated Substances: This material is not listed. Ontario Designated Substances: This material is not listed. Quebec Designated Substances: This material is not listed.

Date of issue/Date of revision : 4/01/2018 11/13

### Section 16. Other information

Canada Label requirements : Class B-2: Flammable liquid

**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.)



Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

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.

#### **History**

Date of printing : 4/01/2018

Version : 1

**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 = Intermediate Bulk Container

IMDG = 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

Date of issue/Date of revision : 4/01/2018 12/13

### Section 16. Other information

DSL - Domestic Substances List GWP – Global Warming Potential

IARC - 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. ✓ 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.

Date of issue/Date of revision : 4/01/2018 13/13