SECTION 1: IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Product name	: Propane
Trade name	: Propane; Liquid Petroleum Gas (LPG)
Additional identification	
EC No.	: 1272/2008
REACH Registration No.	: Exempt from REACH registration (Regulation EC 1907/2006)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses:

- Fuel

Uses advised against

- Contact supplier for more information on uses.
- Uses other than those listed above are not supported.

1.3. Details of the supplier of the safety data sheet

Supplier	: Pro Gases UK 28 Forth Street, Bootle Liverpool, L20 8JW
Telephone	: 0151 922 1118
E-mail	: info@progasesuk.com

1.4. Emergency telephone number: +44 (0) 127356 9048

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended.

Physical Hazards		
Flammable gas	Category 1	H220: Extremely flammable gas.
Chemically unstable gases	Category A	H230: May react explosively even in the absence of air.
Gases under pressure	Dissolved gas	H280: Contains gas under pressure; may explode if heated.

2.2. Label Elements

Signal Word : **Danger**

Hazard Statement(s)

- H220: Extremely flammable gas.
- H280: Contains gas under pressure; may explode if heated.

Precautionary Statements

General : None

Prevention:

- P202: Do not handle until all safety precautions have been read and understood.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P243: Take precautionary measures against static discharge.
- P410: Protect from sunlight.

Response:

- P377: Leaking gas fire: Do not extinguish unless leak can be stopped safely.
- P381: In case of leakage, eliminate all ignition sources.

Storage:

- P403: Store in a well-ventilated place.

Disposal

- P501: Dispose of cylinder via gas supplier only; cylinder contains a porous material which in some cases contains asbestos.

2.3. Other hazards

May displace oxygen and cause rapid suffocation. Does not meet the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent, very bioaccumulative (vPvB) substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical name	: Propane
CASRN	: 74-98-6
EINECS	: 200-827-9
Concentration	: >80
REACH Registration No.	: 01-2119486944-21-0041
CLP Classification	: H220
DSD Classification	: F+; R12

Chemical name	: Propene
CASRN	: 115-07-1
EINECS	: 204-062-1
Concentration	: >20
REACH Registration No.	: 01-2119447103-50-0028
CLP Classification	: H220
DSD Classification	: F+; R12

Chemical name	: Butane
CASRN	: 106-97-8
EINECS	: 203-448-7
Concentration	: >10
REACH Registration No.	: Not applicable
CLP Classification	: H220
DSD Classification	: F+; R12

The concentrations of the components in the SDS header, product name on page one and in section 3.2 are in mol due to regulatory requirements. All concentrations are nominal.

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

SECTION 4: FIRST AID MEASURES

General:

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/ consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

4.1. Description of first aid measures

Inhalation:

In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/ consciousness. Victim may not be aware of asphyxiation. Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing stopped.

Eye contact:

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

Skin Contact:

Liquefied gases may cause cryogenic burns or injury. Treat burned or frostbitten skin by flushing or immersing the affected area(s) in lukewarm water. Do not rub affected area. Do not remove clothing that adheres due to freezing. After sensation has returned to the frostbitten skin, keep skin warm, dry, and clean. If blistering occurs, apply a sterile dressing. Seek immediate medical attention.

Ingestion:

Ingestion is not considered a potential route of exposure.

4.2. Most important symptoms and effects, both acute and delayed

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

4.3. Indication of any immediate medical attention and special treatment needed

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

SECTION 5: FIREFIGHTING MEASURES

General Fire Hazards : Heat may cause the containers to explode.

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Substance or mixture:

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

Hazardous Combustion Products:

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

5.3. Advice for firefighters

Special firefighting procedures:

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

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

Special protective equipment for firefighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Guideline: EN 469 Protective clothing for firefighters. Performance requirements for protective clothing for firefighting. EN 15090 Footwear for firefighters. EN 659 Protective gloves for firefighters. EN 443 Helmets for firefighting in buildings and other structures. EN 137 Respiratory protective devices - Self-contained open circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

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

6.2. Environmental Precautions

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

6.3. Methods and material for containment and cleaning up:

Notify relevant authorities in accordance with all applicable regulations.

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from ignition sources such as heat/sparks/open flame – No smoking. Take precautionary measures against static discharge. Use good personal hygiene practices and wear appropriate personal protective equipment.

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

The use of hydrocarbon fuel in an area without adequate ventilation may result in hazardous levels of incomplete combustion products (e.g. carbon monoxide, oxides of sulfur and nitrogen, benzene and other hydrocarbons) and/or dangerously low oxygen levels.

Propane and odorant are heavier than air and will collect and pool along the ground or floor. Odorant, therefore, may not be detectable above the location of propane storage or service (for example, odorant in propane released or leaked into the basement of a dwelling may not be detected above the basement).

WARNING - The intensity of the odorant may fade over prolonged storage or in the presence of rust, when placed initially in new or freshly-cleaned storage vessels, or when exposed to masonry.

7.2. Conditions for safe storage, including any incompatibilities:

Keep container(s) tightly closed and properly labeled. Use and store this material in cool, dry, well-ventilated areas away from heat, direct sunlight, hot metal surfaces, and all sources of ignition. Store only in approved containers. Post area "No Smoking or Open Flame." Keep away from any incompatible material (see Section 10). Avoid exposing any part of a compressed-gas cylinder to temperatures above 125F(51.6C). Protect container(s) against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet Country or Committee standards and appropriate fire codes.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat,

flame, sparks, or other sources of ignition. They may explode and cause injury or death.

7.3. Specific end use(s)

None.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Chemical Name	Propane	Propene	Butane
ACGIH	-	TWA: 500 ppm	STEL: 1000 ppm
Ireland-HSA	TWA: 1000 ppm	TWA: 500 ppm	TWA: 1000 ppm
Other	-	-	-

8.2. Exposure controls

Appropriate engineering controls

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

Individual protection measures, such as personal protective equipment

General information

A risk assessment should be conducted and documented in each work area to assess the risks related to the use of the product and to select the PPE that matches the relevant risk. The following recommendations should be considered.

Keep self-contained breathing apparatus readily available for emergency use. Personal protective equipment for the body should be selected based on the task being performed and the risks involved. Refer to local regulations for restriction of emissions to the atmosphere. See section 13 for specific methods for waste gas treatment. Do not eat, drink or smoke when using the product.

Eye/face protection:

Safety eyewear, goggles or face-shield to EN166 should be used to avoid exposure to liquid splashes. Wear eye protection to EN 166 when using gases.

Guideline: EN 166 Personal Eye Protection.

Skin protection

Hand Protection:

Guideline: EN 388 Protective gloves against mechanical risks.

Additional Information: Wear working gloves while handling containers

Body protection:

Wear fire resistant or flame retardant clothing.

Guideline: ISO/TR 2801:2007 Clothing for protection against heat and flame --

General recommendations for selection, care and use of protective clothing.

Other:

Wear safety shoes while handling containers

Guideline: ISO 20345 Personal protective equipment - Safety footwear.

Respiratory Protection

When allowed by a risk assessment Respiratory Protective Equipment (RPE) may be used. The selection of the Respiratory Protective Device (RPD) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected RPD. Self-contained breathing apparatus (SCBA) or positive pressure airline with mask are to be used in oxygen-deficient atmospheres.

Guideline: EN 137 Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking.

Thermal hazards

No precautionary measures are necessary.

Hygiene measures

Specific risk management measures are not required beyond good industrial hygiene and safety procedures. Do not eat, drink or smoke when using the product.

Environmental exposure controls

Refer to Sections 6, 7, 12 and 13.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	
Physical state	: Liquefied Gas
Form	: Liquified Gas
Colour	: Colourless
Odour	: No distinct odor
Odour Threshold	: N/D
pH	: Not applicable.
Melting Point	: -24 °C
Boiling Point	: -48 to -42 °C
Flash Point	: -104 °C
Evaporation Rate	: Not applicable to gases and gas mixtures.
Flammability (solid, gas)	: Extremely Flammable gas
Flammability limit - upper (vol % in air)	: 9.5
Flammability limit - lower (vol % in air)	2.2
Vapour pressure	: 1650 kPa (40 °C)
Vapour density (air=1)	: 1.56
Relative water density	: 0.51 (15 °C)
Solubility(ies)	
Solubility	: 6.5% by volume @ 17.8°C
Partition coefficient (n-octanol/water)	: N/D
Autoignition Temperature	: 450 °C
Decomposition Temperature	: N./D
Viscosity	
Kinematic viscosity	: 0.2 mm2/s @ 15°C
Explosive properties	: Not applicable.
Oxidising Properties	: Not applicable.

9.2. Other information

Pour Point	N/D

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity:

No reactivity hazard other than the effects described in sub-section below.

10.2. Chemical Stability:

Stable under normal conditions.

10.3. Possibility of Hazardous

Reactions:

Hazardous reactions not anticipated.

10.4. Conditions to Avoid:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. High temperature High pressure May decompose violently at high temperature and/or pressure or in the presence of a catalyst.

10.5. Incompatible Materials:

Avoid contact with acids, aluminium chloride, chlorine, chlorine dioxide, halogens and oxidizing agents.

10.6. Hazardous Decomposition Products:

Not anticipated under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

General information	: None.

11.1. Information on toxicological effects

Acute toxicity – Oral Product	Based on available data, the classification criteria are not met.
Acute toxicity – Dermal Product	Based on available data, the classification criteria are not met.
Acute toxicity – Inhalation Product	Based on available data, the classification criteria are not met.
Skin Corrosion/ Irritation Product	Based on available data, the classification criteria are not met.
Serious Eye Damage/ Eye Irritation Product	Based on available data, the classification criteria are not met.

Respiratory or Skin Sensitisation Product	Based on available data, the classification criteria are not met.
Germ Cell Mutagenicity Product	Based on available data, the classification criteria are not met.
Carcinogenicity Product	Based on available data, the classification criteria are not met.
Reproductive toxicity Product	Based on available data, the classification criteria are not met.
Specific Target Organ Toxicity - Single Exposure Product	Based on available data, the classification criteria are not met.
Specific Target Organ Toxicity - Repeated Exposure Product	Based on available data, the classification criteria are not met.
Aspiration Hazard Product	Not applicable to gases and gas mixtures.

11.2 Information on Hazardous Components

Propane

Target Organ(s): No systemic or neurotoxic effects were noted in rats exposed to concentrations of propane as high as 12,000 ppm for 28 days.
Reproductive Toxicity: No adverse reproductive or developmental effects were observed in rats exposed to propane; no observed adverse effect level = 12,000 ppm.

Butane

Target Organ(s): No systemic or neurotoxic effects were noted in rats exposed to concentrations of butane as high as 9,000 ppm for 28 days.
Reproductive Toxicity: No adverse reproductive or developmental effects were observed in rats exposed to butane; no observed adverse effect level = 12,000 ppm.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Petroleum gases will readily evaporate from the surface and would not be expected to have significant adverse effects in the aquatic environment.

12.2. Persistence and Degradability Product

The hydrocarbons in this material are expected to be inherently biodegradable. In practice, hydrocarbon gases are not likely to remain in solution long enough for biodegradation to be a significant loss process.

12.3. Bioaccumulative Potential Product

Log Kow values measured for the hydrocarbon gases range from 2.3 for propane to 2.8 for butane and are not regarded as having the potential to bioaccumulate.

12.4. Mobility in Soil Product

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

12.5. Results of PBT and vPvB assessment Product

Not classified as PBT or vPvB.

12.6. Other Adverse Effects

No ecological damage caused by this product.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

General information:

European Waste Code: 16 05 04* gases in pressure containers (including halons) containing dangerous substances

This material, if discarded as produced, would be considered as hazardous waste pursuant to Directive 2008/98/EC on hazardous waste, and subject to the provisions of that Directive unless Article 1(5) of that Directive applies.
This code has been assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use. Waste generators/producers are responsible for assessing

the actual process used when generating the waste and it's contaminants in order to assign the proper waste disposal code.

Disposal must be in accordance with Directive 2008/98/EC and other applicable national or regional provisions, and based upon material characteristics at time of disposal. For incineration of waste, follow Directive 2000/76/EC. For landfill of waste, follow Directive 1999/31/EC. Product is suitable for burning in an enclosed controlled burner for fuel value if >5000 BTU, or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. Follow Directive 2000/76/EC.

Empty Containers: Container contents should be completely used and containers emptied prior to discard. Empty drums should be properly sealed and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with applicable regulations.

European Waste Codes

Container: 16 05 04*: gases in pressure containers (including halons) containing dangerous substances

SECTION 14: TRANSPORT INFORMATION

ADR

14.1. UN Number

UN 1978

14.2. UN Proper Shipping Name

PROPANE

14.3. Transport Hazard Class(es)

Class	: 2.1
Label(s)	: 2.1

14.4. Packing Group:

–

14.5. Environmental hazards

Not a marine pollutant.

14.6. Special precautions for user:

–

RID

14.1. UN Number

UN 1978

14.2. UN Proper Shipping Name

PROPANE

14.3. Transport Hazard Class(es)

Class	: 2.1
Label(s)	: 2.1

14.4. **Packing Group**:

–

14.5. Environmental hazards

Not a marine pollutant.

14.6. Special precautions for user

–

IMDG

14.1. UN Number

UN 1978

14.2. UN Proper Shipping Name

PROPANE

14.3. Transport Hazard Class(es)

Class	: 2.1
Label(s)	: 2.1

14.4. **Packing Group**:

–

14.5. Environmental hazards

Not a marine pollutant.

14.6. Special precautions for user

–

IATA

14.1. UN Number

UN 1978

14.2. UN Proper Shipping Name

PROPANE

14.3. Transport Hazard Class(es)

Class	: 2.1
Label(s)	: 2.1

14.4. Packing Group:

–

14.5. Environmental hazards

Not a marine pollutant.

14.6. Special precautions for user

–

Other information

Passenger and cargo aircraft	: Forbidden.
Cargo aircraft only	: Allowed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

Additional identification

Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers ensure that they are firmly secured. Ensure that the container valve is closed and not leaking. Container valve guards or caps should be in place. Ensure adequate air ventilation.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/ legislation specific for the substance or mixture

EC 1272/2008 - Classification, labelling and packaging of substances and mixtures EN166:2002 Eye Protection
EN 529:2005 Respiratory Protective devices
BS EN 374-1:2003 Protective gloves against chemicals and micro-organisms Occupational Exposure Limits, Health and Safety Authority

Directive 2008/98/EC (Waste Framework Directive)
Directive 2000/76/EC on incineration of waste
Directive 1999/31/EC on landfill of waste

Export Rating: NLR (No License Required)

15.2. Chemical safety assessment

CSA has been carried out.

SECTION 16: OTHER INFORMATION

Revision Information:

Not relevant.

Key literature references and sources for data:

Various sources of data have been used in the compilation of this SDS, they include but are not exclusive to:

Agency for Toxic Substances and Diseases Registry (ATSDR)

(http://www.atsdr.cdc.gov/).

European Chemical Agency: Guidance on the Compilation of Safety Data Sheets.

European Chemical Agency: Information on Registered Substances

http://apps.echa.europa.eu/registered/registered-sub.aspx#search

European Industrial Gases Association (EIGA) Doc. 169 “Classification and Labelling guide”, as amended.

International Programme on Chemical Safety (http://www.inchem.org/)

ISO 10156:2010 Gases and gas mixtures - Determination of fire potential and oxidizing ability for the selection of cylinder valve outlets.

Matheson Gas Data Book, 7th Edition.

National Institute for Standards and Technology (NIST) Standard Reference Database Number 69.

The ESIS (European chemical Substances 5 Information System) platform of the former European Chemicals Bureau (ECB) ESIS (http://ecb.jrc.ec.europa.eu/esis/).

The European Chemical Industry Council (CEFIC) ERICards.

United States of America's National Library of Medicine's toxicology data network

TOXNET (http://toxnet.nlm.nih.gov/index.html)

Threshold Limit Values (TLV) from the American Conference of Governmental

Industrial Hygienists (ACGIH).

Substance specific information from suppliers.

Details given in this document are believed to be correct at the time of publication. EH40 (as amended) Workplace exposure limits.

Wording of the H-statements in sections 2 and 3

H220	Extremely flammable gas
R12	Extremely flammable
H280	Contains gas under pressure; may explode if heated.

Training information:

Users of breathing apparatus must be trained. Ensure operators understand the flammability hazard.

Classification according to Regulation (EC) No 1272/2008 as amended.

CLP Classification (EC No 1272/2008)
H220 -- Flammable gases -- Category 1 information. H280 -- Gases under pressure -- Liquefied gas on component information.

Other information:

Before using this product in any new process or experiment, a thorough material compatibility and safety study should be carried out. Ensure adequate air ventilation.

Ensure all national/local regulations are observed. Ensure equipment is adequately earthed. Whilst proper care has been taken in the preparation of this document, no liability for injury or damage resulting from its use can be accepted. Note: When the Product Name appears in the SDS header the decimal sign and its position comply with rules for the structure and drafting of international standards and is a comma on the line. As an example, 2,000 is two (to three decimal places) and not two thousand, whilst 1.000 is one thousand and not one (to three decimal places).

Last revised date:

01.02.2022

Disclaimer:

This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.