1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

1.1 Product Identifier

Material Name : AvantiGas Specialised Hydrocarbon Aerosol Propellant

Product Description : Complex mixture of hydrocarbons consisting predominantly of butanes and butenes, propane and propenes plus some C5 and higher hydrocarbons. Both the Butanes and Propanes contained within comply with BS 4250:2014.

1.2 Relevant Identified Uses of the substance or mixture and advised against

Product Uses : Used as an Aerosol Propellant

Uses Advised Against : This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the Supplier.

1.3 Details of the supplier of the substance or mixture

Manufacturer/Supplier : Avanti Gas Limited
UGI House
Gisborne Close
Staveley
Chesterfield
Derbyshire
S43 3JT
United Kingdom

Telephone : +44 (0) 808 208 0000
Email Contact for SDS : enquiries@avantigas.com

1.4 Emergency Telephone Number : 0870 753 9999

1.5 Other Information : This product is exempt from the obligation to register under REACH (Regulation (EC) No.1907/2006): in accordance with Article 2(7)(b) referencing its Annex V exemption.

2. HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

<table>
<thead>
<tr>
<th>Hazard classes / Hazard categories</th>
<th>Regulation (EC) No 1272/2008 (CLP) Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Gas, Category 1</td>
<td>H220 – extremely flammable gas</td>
</tr>
<tr>
<td>Gases under pressure</td>
<td>H280 – contains gas under pressure, may explode if heated</td>
</tr>
</tbody>
</table>
2.2 Label Elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Classification)

CLP Classification Symbols

| GHS02 Flame | GHS04 Gas Cylinder |

Signal Words: Danger

CLP Hazard Statements:

PHYSICAL HAZARDS:
H220: Extremely flammable gas.
H280: Contains gas under pressure; may explode if heated. Harmful if inhaled.

HEALTH HAZARDS:
Not classified as a health hazard under GHS criteria.

ENVIRONMENTAL HAZARDS:
Not classified as an environmental hazard under GHS criteria.

CLP Precautionary statements

Prevention:
P102: Keep out of reach of children.
P210: Keep away from heat/sparks/open flames/hot surfaces.
– no smoking.
P243: Take precautionary measures against static discharge.

Response:
P377: Leaking gas fire: Do not extinguish, unless leak can be stopped safely.
P381: Eliminate all ignition sources if safe to do so.

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

2.3 Other Hazards

Health Hazards:
Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, drowsiness, headache and nausea.
Abuse via wilful inhalation of very high concentration of product vapour, even for short periods of time can induce unconsciousness and may prove fatal.
High gas concentrations will displace available oxygen from the air; unconsciousness and death may occur suddenly from lack of oxygen.
Exposure to rapidly expanding gases may cause frost burns to eyes and/or skin.
Safety Hazards: Vapours are heavier than air. Vapours may travel across the ground and reach remote ignition sources causing a flashback fire danger. Electrostatic charges may be generated during pumping. Electrostatic discharge, if not suitably earthed may cause fire as an ignition source.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

CAS No.: 68476-85-7

3.2 Mixtures

Preparation Description: Complex mixture of hydrocarbons consisting predominantly of butanes and butenes, propane and propenes plus some C5 and higher hydrocarbons. Low concentrations of sulphur, hydrogen sulphide and mercaptans may be present.

Synonyms: Specialised Hydrocarbon Aerosol Propellant 22 (SHAP 22)
Specialised Hydrocarbon Aerosol Propellant 30 (SHAP 30)
Specialised Hydrocarbon Aerosol Propellant 39 (SHAP 39)
Specialised Hydrocarbon Aerosol Propellant 40 (SHAP 40)
Specialised Hydrocarbon Aerosol Propellant 48 (SHAP 48)
Specialised Hydrocarbon Aerosol Propellant 70 (SHAP 70)
Specialised Hydrocarbon Aerosol Propellant 105 (SHAP 105)

Hazardous Components

Classification of components according to Regulation (EC) No 1272/2008

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>EINECS</th>
<th>REACH Registration No.</th>
<th>Conc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum Gases, Liquefied</td>
<td>68476-85-7</td>
<td>270-704-2</td>
<td>Exempt</td>
<td>&lt;= 100.00%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazard Class &amp; Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
</table>

Additional Information: Refer to section 16 for full text of Hazard Precautionary Statements
4. DESCRIPTION OF FIRST AID MEASURES

4.1 General Advice: Do not enter area unless confirmed safe to do so, if possible remove any affected person to uncontaminated safe area.

4.2 Inhalation: Remove the affected person into fresh air. If breathing but unconscious, place in the recovery position. If breathing has stopped, apply artificial respiration. If heartbeat absent, give external cardiac compression. Monitor breathing and pulse. Seek urgent medical advice.

4.3 Skin Contact: In the event of frostbite, slowly warm the exposed area by rinsing with warm water. Obtain medical treatment immediately. Keep warm and at rest. Seek medical advice before removing clothing. Contaminated clothing may be a fire hazard and therefore should be soaked with water before being removed.

4.4 Eye Contact: DO NOT DELAY. Obtain medical treatment immediately. Remove contact lenses, if present and easy to do. Continue rinsing. Flush eye with copious quantities of water.

4.5 Ingestion: In the unlikely event of ingestion, obtain medical attention immediately.

4.6 Most important symptoms/effects, acute & delayed: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued exposure may result in unconsciousness and/or death.

4.7 Indication of immediate medical attention and special treatment needed: Treat symptomatically. Administer oxygen if necessary.

5. FIRE FIGHTING MEASURES

Evacuate the fire area of all non-emergency personnel.

5.1 Extinguishing Media: Shut off supply. If not possible and no risk to surroundings, let the fire burn itself out. If safe to do so use foam, water fog for major fires. Use dry chemical powder, carbon dioxide, sand or earth for minor fires.

Unsuitable Extinguishing Media: Do not use direct water jets on the burning product as they could cause a steam explosion and spread of the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2 Special hazards arising from substance or mixture: Hazardous combustion products may include: Carbon monoxide, Carbon Dioxide, Unidentified organic and inorganic compounds. Sustained fire attack on vessels may result in a Boiling Liquid Expanding Vapour Explosion (BLEVE). Contents are under pressure and can explode when exposed to heat or flames. The vapour is heavier than air, spreads along the ground and distant ignition is possible.
5.3 Advice for Fire-fighters : Wear full protective clothing and self-contained breathing apparatus

Additional Advice : Keep adjacent containers cool by spraying with water.
Fire Fighting, particularly with foam and water may give rise to contaminants entering water courses.

6. ACCIDENTAL RELEASE MEASURES

Evacuate the area of all non-essential personnel. Ventilate contaminated area thoroughly. Avoid contact with spilled or released material. Obtain medical advice before removing contaminated clothing. Do not attempt remove clothing if adhering to skin. For guidance on selection of personal protective equipment see section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see section 13 of this Safety Data Sheet.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures :
- Shut off leaks, if possible without personal risks;
- Remove all possible sources of ignition in the surrounding area;
- Evacuate all personnel;
- Call the Emergency Services if required;
- Attempt to disperse the gas or to direct its flow for example by using fog sprays to a safer location e.g. area free from ignition sources.
- Attempt to prevent the gas from entering low lying areas e.g. cellars, pits, drains, sewers or confined spaces
- Attempt to prevent the gas from entering watercourses e.g. rivers, sewers.
- Take precautionary measures against static discharge.
- Ensure electrical continuity by bonding and grounding (earthing) all equipment.
- Confirm all electrical equipment is suitable for use in the area
- Monitor area with combustible gas meter.
- Use appropriate containment to avoid environmental contamination.
- Test atmosphere for flammable gas concentrations to ensure safe working conditions before personnel are allowed to enter the area.

6.2 Environmental Precautions :
- Avoid loss of containment to the environment. Use appropriate containment methods to avoid environmental contamination.

6.3 Methods and Material for Containment and Clean Up :
- Small spillage - Allow to evaporate, contain spillage with suitable adsorbent media. Any Firefighting products should be contained using appropriate methods.
- Large spillage – Notify Emergency Services. If trained and competent to do so attempt to disperse the vapour or to direct its flow to a safer location, for example by using fog sprays. Any Firefighting products should be contained using appropriate methods.
Additional Advice: Notify authorities if any exposure to the general public or the environment occurs or is likely to occur. Vapour may form an explosive mixture with air. Risk of explosion. Inform the Emergency Services if product enters surface water drains.

7. HANDLING AND STORAGE

General Precautions: Avoid breathing vapours or contact with material. Only use in well ventilated areas. Wash thoroughly after handling. For guidance on selection of personal protective equipment see Section 8 of this Safety Data Sheet. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. Contaminated leather articles including shoes cannot be decontaminated and should be destroyed to prevent reuse. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Air-dry contaminated clothing in a well-ventilated area before laundering. Use local exhaust ventilation if there is a risk of inhaling vapours, mists or aerosols.

7.1 Precautions for Safe Handling: This product can create a low temperature exposure hazard when released as a liquid. Avoid prolonged or repeated contact with skin. Extinguish any naked flames. Do not smoke. Remove potential ignition sources, including portable electronic devices. Avoid any spark creation. Electrostatic charges may be generated during handling. Electrostatic discharge may cause fire. Earth all equipment. Use suitable Personal Protective Equipment as described below.

7.2 Conditions for safe storage, including any incompatibilities: Store only in purpose-designed, appropriately labelled pressure vessels or cylinders. Must be stored in a well-ventilated area, away from sunlight, ignition sources and other sources of heat. Do not store near cylinders containing compressed oxygen or other strong oxidizers.

7.3 Specific End Uses: Not applicable

Additional Information: This product is intended for use in closed systems only. Ensure that all local regulations regarding handling and storage facilities are followed. Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".
Product Transfer: Do not use compressed air for filling, discharging or handling. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Delivery lines may become cold enough to present a cold burns hazard.

Recommended Materials: For containers and container linings, use materials specifically approved for use with this product. Examples of suitable materials are: PA-11, PEEK, PVDF, PTFE, GRE (Epoxy), GRVE (vinyl ester), Viton (FKM), type F and GB, Neoprene (CR).

Unsuitable Materials: Some forms of cast iron. Examples of materials to avoid are: ABS, polymethyl methacrylate (PMMA), polyethylene (PE / HDPE), polypropylene (PP), PVC, natural rubber (NR), Nitrile (NBR) ethylene propylene rubber (EPDM), Butyl (IIR), Hypalon (CSM), polystyrene, polyvinyl chloride (PVC), polyisobutylene. For containers and container linings, aluminium should not be used if there is a risk of caustic contamination of the product.

Container Advice: Containers, even those that have been emptied, can contain explosive vapours. Do not cut, drill, grind, weld or perform similar operations on or near containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

<table>
<thead>
<tr>
<th>Material</th>
<th>Source</th>
<th>Type</th>
<th>ppm</th>
<th>mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquified Petroleum Gas</td>
<td>EH40 WEL</td>
<td>TWA (8-hour reference period)</td>
<td>1,000 ppm</td>
<td>1,750mg/m³</td>
</tr>
<tr>
<td></td>
<td>EH40 WEL</td>
<td>STEL (15-minute reference period)</td>
<td>1,250 ppm</td>
<td>2,180mg/m³</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>Source</th>
<th>Hazard Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquified Petroleum Gas</td>
<td>EH40 (UK)</td>
<td>Carc (only applies if LPG contains more than 0.1% of buta-1, 3-diene)</td>
</tr>
</tbody>
</table>

Biological Exposure Index (BEI)

No biological limit allocated.

Derived No Effect Levels (DNEL): Not applicable.

PNEC related information: Exposure assessments have not been presented for the environment therefore PNEC values not required.
8.2 Exposure Controls

**General Information**

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.

Appropriate measures include: Use sealed systems as far as possible. Adequate explosion-proof ventilation to control airborne concentrations below the exposure guidelines/limits. Local exhaust ventilation is recommended.

**Occupational Exposure Controls**

**Personal Protective Equipment**

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

**Eye Protection**

Chemical splash goggles (gas-tight mono-goggles) and face shield with chin guard. Approved to EU Standard EN166.

**Hand Protection**

Personal hygiene is a key element of effective hand care. Gloves must be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, and dexterity. Always seek advice from glove suppliers.

Contaminated gloves should be replaced. Where hand contact with the product may occur the use of gloves approved to relevant standards e.g. EN 374, made from the following materials may provide suitable chemical protection: Neoprene rubber. Nitrile rubber.

If contact with liquefied product is possible or anticipated, gloves should be thermally insulated to prevent cold burns e.g. EN 511

**Body Protection**

Chemical resistant, fire retardant, anti-static clothing and cold resistant gloves/gauntlets, safety boots and apron.

**Respiratory Protection**

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Check with respiratory protective equipment suppliers. Where air-filtering respirators are unsuitable (e.g. airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus. Where air filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point <65 °C (149 °F)]

Before any such Respiratory protection is used, the Wearer must be trained and competent in its use and any limitations.
**Thermal Hazards**: When handling cold material that can cause frost burns, wear cold resistant, thermal gloves, safety hat and visor, Fire retardant, Anti-static, cold resistant overalls (with cuffs over gloves and legs over boots) and heavy-duty boots e.g. leather for cold resistance.

**Monitoring Methods**: Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances, biological monitoring may also be appropriate.

**Environmental Exposure Controls**

**Environmental Exposure Control Measures**: Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 **Information on basic physical and chemical properties**

- **Appearance**: Colourless. Liquid under pressure.
- **Odour**: Odourless if unstenched.
- **pH**: Not applicable
- **Initial Boiling Point and Boiling Range**: Typical -40 °C to -2 °C / -40 °F to 28 °F, 1,013 hPa
- **Flash point**: Typical < - 60 °C / - 76 °F
- **Upper / lower Flammability or Explosion limits**: Typical 1.4 - 10.9 %(V)
- **Auto-ignition temperature**: Typical 365 °C / 689 °F
- **Vapour pressure**: ca. 590 to 1,760 kPa at 45 °C / 113 °F
- **Density**: Typical 500 - 510 kg/m3 at 15 °C / 59 °F
- **Water solubility**: Negligible
- **Solubility in other solvents**: Data not available
- **n-octanol/water partition coefficient (log Pow)**: ca. 2.3 to 2.8
- **Dynamic viscosity**: Not applicable.
- **Kinematic viscosity**: Not applicable.
- **Vapour density (air=1)**: ca. 1.5 at 15 °C / 59 °F
- **Evaporation rate (nBuAc=1)**: Data not available
- **Flammability**: Extremely flammable

9.2 **Other Information**

**Other Information**: Not applicable
10. STABILITY AND REACTIVITY

10.1 Reactivity: No, product will not become self-reactive.
10.2 Chemical Stability: Stable.
10.3 Possibility of Hazardous Reactions: No, hazardous, exothermic polymerization cannot occur.
10.4 Conditions to Avoid: Heat, open flames, sparks and flammable atmospheres.
10.5 Incompatible Materials: Strong oxidising agents (e.g. Chlorates & Nitrates)
10.6 Hazardous Decomposition Products: Hazardous decomposition products are not expected to form during normal storage. If combusted compounds of Carbon Dioxide and Carbon monoxide will be released to atmosphere during any fire.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological effects
Basis for Assessment: Information given is based on product data, a knowledge of the components and the toxicology of similar products.
Likely Routes of Exposure: Inhalation is the primary route of exposure although exposure may occur through skin or eye contact.
Acute Oral Toxicity: Not applicable.
Acute Dermal Toxicity: Not applicable.
Acute Inhalation Toxicity: Low toxicity: LC50 >20 mg/l / 4.00 h, Rat
Skin Corrosion/Irritation: Not irritating to skin.
Serious Eye Damage/Irritation: Essentially non-irritating to eyes.
Respiratory Irritation: Inhalation of vapours or mists may cause irritation to the respiratory system.
Respiratory or Skin Sensitisation: Not expected to be a sensitiser.
Aspiration Hazard: Not considered an aspiration hazard.
Germ Cell Mutagenicity: No evidence of mutagenic activity.
Carcinogenicity: Not expected to be carcinogenic.
Reproductive and Developmental Toxicity: Not expected to impair fertility. Not a developmental toxicant.
Specific Target Organ Toxicity - Single Exposure: High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in unconsciousness and/or death.
Specific Target Organ Toxicity - Repeated Exposure: Low systemic toxicity on repeated exposure.
Additional Information

Rapid release of gases which are liquids under pressure may cause frost burns of exposed tissues (skin, eye) due to evaporative cooling.

High gas concentrations will displace available oxygen from the air; unconsciousness and death may occur suddenly from lack of oxygen.

Exposure to very high concentrations of similar materials has been associated with irregular heart rhythms and cardiac arrest.

12. ECOLOGICAL INFORMATION

Basis for Assessment

Information given is based on product testing, and/or similar products, and/or components.

12.1 Toxicity

Acute Toxicity

Physical properties indicate that petroleum gases will rapidly volatilise from the aquatic environment and that acute and chronic effects would not be observed in practice.

12.2 Persistence and degradability

Expected to be readily biodegradable. Oxidises rapidly by photochemical reactions in air.

12.3 Bioaccumulative Potential

Not expected to bioaccumulate significantly.

12.4 Mobility

Because of their extreme volatility, air is the only environmental compartment that hydrocarbon gases will be found.

12.5 Result of the PBT and vPvB assessment

The substance does not fulfil all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.

12.6 Other Adverse Effects

In view of the high rate of loss from solution, the product is unlikely to pose a significant hazard to aquatic life.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Material Disposal

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations.

Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Do not dispose into the environment, in drains or in water courses. Given the nature and uses of this product, the need for disposal seldom arises. If necessary, dispose by controlled
AvantiGas Specialised Hydrocarbon Aerosol Propellant

Version 1.10

Effective Date 08.05.2019

Regulation 1907/2006/EC

Safety Data Sheet

Container Disposal

Return part-used or empty cylinders to the supplier. For tanks seek specialist advice from suppliers. Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.

Local Legislation

Disposal should be in accordance with all applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.

EU Waste Disposal Code (EWC): 16 05 04 gases in pressure containers (including halons) containing dangerous substances.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>Transport Category</th>
<th>Land Transport</th>
<th>Inland Waterways Transport (ADN)</th>
<th>Sea Transport (IMDG)</th>
<th>Air Transport (IATA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No</td>
<td>ADR</td>
<td>1965</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.2 Un ProperShipping Name</td>
<td>HYDROCARBON GAS MIXTURE, LIQUIFIED, NOS.(Propane/Butane)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.3 Transport Hazard Class</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.4 Danger label (Primary Risk)</td>
<td>2.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.5 Environmental hazard</td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.6 Special Precautions for user</td>
<td>Special Precautions: Refer to Chapter 7, Handling &amp; Storage, for special precautions, which a user needs to be aware of or needs to comply with in connection with transport.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Information

Local regulations: UN1965 classification is used for petroleum gases, liquefied.

Hazchem code: 2YE (Emergency Action Code - UK /CDG)  
23 (Emergency action Code - EU / ADR)

IATA - Forbidden for transport on passenger aircraft.

Avoid transport on where the load space is not separated from the drivers compartment.

Ensure vehicle driver is trained in the transport of this substance including accident and emergency procedures.

The transport information is not intended to convey all specific regulatory data relating to this material.

Print Date 08.05.2019

SDS_GB
15. REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

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

Other regulatory Information


15.2 Chemical Safety Assessment: No chemical safety assessment has been performed for this substance due to its REACH (Annex V) exemption

16. OTHER INFORMATION

CLP Hazard Statements

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

Identified Uses according to the Use Descriptor System

Recommended Restrictions on Use (Advice Against): This product must not be used in applications other than those recommended in Section 1, without first seeking the advice of the supplier.

Additional Information: This document contains important information to ensure the safe storage, handling and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.

Other Information

SDS Distribution: If the product is supplied to a downstream user or distributor and they request an SDS it must be supplied. The safety data sheet need not be supplied where hazardous substances or mixtures offered or sold to the general public are provided with sufficient information to enable users to take the necessary measures as regards the protection of human health, safety.
Abbreviations & Acronyms

- **ADN**: European Agreement Concerning the International Carriage of Dangerous Goods by Inland waterways
- **ADR**: European Agreement Concerning the International Carriage of Dangerous Goods By Road
- **CAS**: Chemical Abstract Service Number
- **CDG**: The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations
- **CLP**: Classification Labelling & Packaging Regulation (EC No. 1272/2008)
- **COMAH**: Control of Major Accident Hazards
- **DSEAR**: The Dangerous Substances and Explosive Atmospheres Regulations
- **EH40**: Workplace exposure limits - Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations
- **EINECS**: European Inventory of Existing Commercial Chemical Substances
- **EN**: European Standard
- **GHS**: Global Harmonised System of Classification and Labelling of Chemicals
- **IMDG**: International Maritime Dangerous Goods Code
- **OEL**: Occupational Exposure Limit
- **PBT**: Persistent Bio accumulative and Toxic
- **vPvB**: Very Persistent and Very Bio accumulative
- **PPE**: Personal Protective Equipment
- **PSSR**: The Pressure Systems Safety Regulations
- **REACH**: Registration, Evaluation, Authorisation and Restriction of Chemicals
- **RID**: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- **RIDDOR**: Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
- **STEL**: Short-Term Exposure Limit
- **TWA**: Time-Weighted Averages
- **WEL**: Workplace Exposure Limit