# SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 453/2010)

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

### 1.1. Product identifier

Product name : AERO-SENSE ICE-5 SPRAY

Product code : 095010.

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

Anti-icing product for aviation turbine fuel only. Only use the product conform the instructions on the aerosol.

For professional users only.

### 1.3. Details of the supplier of the safety data sheet

Registered company name : Aero-Sense BVBA/SPRL.

Address : Delaerestraat 41.8800.Roeselare.Belgium.

Telephone : +32 (0)51 26 80 00. Fax : +32 (0)51 46 79 23.

info@aero-sense.com

www.aero-sense.com

### 1.4. Emergency telephone number : +32 (0)70 245 245.

Association/Organisation : Anti-poison Center Belgium.

## SECTION 2 : HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Flammable aerosol, Category 1 (Aerosol 1, H222 - H229).

Reproductive toxicity, Category 2 (Repr. 2, H361).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

**In compliance with directives 67/548/EEC, 1999/45/EC and their amendments.**

Extremely flammable (F+, R 12).

Category 3 reproductive toxin (Xn, R 63 Repr. Cat. 3).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

### 2.2. Label elements

Mixture for aerosol application.

**In compliance with EC regulation No. 1272/2008 and its amendments.**

Hazard pictograms :

GHS08

GHS02

Signal Word :

DANGER

Product identifiers :

EC 203-906-6 2-(2-METHOXYETHOXY)ETHANOL

Hazard statements :

| | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H361d | Suspected of damaging the unborn child. |

Precautionary statements - Prevention :

| | |
|---|---|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P280 | Wear protective gloves (butyl rubber). |

Precautionary statements - Storage :

| | |
|---|---|
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C. |

### 2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) >= 0.1% published by the European CHemicals Agency (ECHA) under article 57 of REACH: http://echa.europa.eu/fr/candidate-list-table

The mixture satisfies neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

## SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

**Composition :**

| Identification | (EC) 1272/2008 | 67/548/EEC | Note | % |
|---|---|---|---|---|
| CAS: 111-77-3<br>EC: 203-906-6<br>REACH: 01-2119475100-52<br><br>2-(2-METHOXYETHOXY)ETHANOL | GHS08<br>Wng<br>Repr. 2, H361d | Xn<br>Repr. Cat. 3;R63 | [1]<br>[2] | 50 <= x % < 100 |
| CAS: 124-38-9<br>EC: 204-696-9<br><br>CARBON DIOXIDE | GHS04<br>Wng<br>Press. Gas, H281 | | [1] | 2.5 <= x % < 10 |

**Information on ingredients :**

[1] Substance for which maximum workplace exposure limits are available.

[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

## SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.

NEVER induce swallowing by an unconscious person.

### 4.1. Description of first aid measures

**In the event of exposure by inhalation :**

Remove the affected person to fresh air. If recovery is not rapid, obtain medical attention. If breathing has stopped, begin artificial respiration immediately. Obtain medical attention without delay.

**In the event of splashes or contact with eyes :**

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

**In the event of splashes or contact with skin :**

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**In the event of swallowing :**

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.

Keep the person exposed at rest. Do not force vomiting.

Seek medical attention, showing the label.

If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

See section 11.

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

If you feel unwell, seek medical advice (show the label if possible). If symptoms persist, always call a doctor.

## SECTION 5 : FIREFIGHTING MEASURES

Flammable.

Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

### 5.1. Extinguishing media

If the aerosols are exposed to a fire : keep containers cool by spraying with water from a protected position.

**Suitable methods of extinction**

In the event of a fire, use :

- sprayed water or water mist
- water with AFFF (Aqueous Film Forming Foam) additive
- powder
- carbon dioxide (CO2)

Prevent the effluent of fire-fighting measures from entering drains or waterways.

**Unsuitable methods of extinction**

In the event of a fire, do not use :

- water jet

**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)

- carbon dioxide (CO2)

In a fire or if heated, a pressure increase will occur and the container may burst. Bursting aerosol containers may be propelled from a fire at high speed. 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.

**5.3. Advice for firefighters**

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

If possible, stop the product stream. Spray from a protected position till the containers are cool. If possible, take the aerosols outside. Keep public on a distance.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

**For non first aid worker**

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area.

**For first aid worker**

First aid workers will be equipped with suitable personal protective equipment (See section 8).

**6.2. Environmental precautions**

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

**6.3. Methods and material for containment and cleaning up**

Clean preferably with a detergent, do not use solvents.

**6.4. Reference to other sections**

No data available.

## SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

**7.1. Precautions for safe handling**

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

**Fire prevention :**

Handle in well-ventilated areas.

Vapours are heavier than air. They can spread along the ground and form mixtures that are explosive with air.

Prevent the formation of flammable or explosive concentrations in air and avoid vapor concentrations higher than the occupational exposure limits.

Do not spray on a naked flame or any incandescent material.

Do not pierce or burn, even after use.

Use the mixture in premises free of naked flames or other sources of ignition and ensure that electrical equipment is suitably protected.

Keep packages tightly closed and away from sources of heat, sparks and naked flames.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

**Recommended equipment and procedures :**

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Do not breathe in aerosols.

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position.

**Prohibited equipment and procedures :**

No smoking, eating or drinking in areas where the mixture is used.

**7.2. Conditions for safe storage, including any incompatibilities**

No data available.

**Storage**

Keep away from all sources of ignition - do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Storage in a dry, frost-free and well ventilated place.

**Packaging**

Always keep in packaging made of an identical material to the original.

**7.3. Specific end use(s)**

No data available.

## SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

**8.1. Control parameters**

**Occupational exposure limits :**

- European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)

| CAS | VME-mg/m3 : | VME-ppm : | VLE-mg/m3 : | VLE-ppm : | Notes : |
|---|---|---|---|---|---|
| 111-77-3 | 50.1 | 10 | - | - | Peau |
| 124-38-9 | 9000 | 5000 | - | - | - |

- UK / WEL (Workplace exposure limits, EH40/2005, 2007) :

| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : |
|---|---|---|---|---|---|
| 124-38-9 | 5000 ppm | 15000 ppm | - | - | - |

- Ireland (Code of practice for the safety, Health and Welfare at Work, 2010) :

| CAS | TWA : | STEL : | Ceiling : | Definition : | Criteria : |
|---|---|---|---|---|---|
| 124-38-9 | 5000 ppm | 15000 ppm | - | - | - |

**Derived no effect level (DNEL) or derived minimum effect level (DMEL):**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| **Final use:** | **Workers.** |
| Exposure method: | Dermal contact. |
| Potential health effects: | Short term systemic effects. |
| DNEL : | 0.53 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 10 ppm |
| **Final use:** | **Consumers.** |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0.27 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 25 mg of substance/m3 |

**Predicted no effect concentration (PNEC):**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| Environmental compartment: | Soil. |
| PNEC : | 2.44 mg/kg |
| Environmental compartment: | Fresh water. |
| PNEC : | 12 mg/l |
| Environmental compartment: | Sea water. |
| PNEC : | 1.2 mg/l |
| Environmental compartment: | Fresh water sediment. |
| PNEC : | 44.4 mg/kg |
| Environmental compartment: | Marine sediment. |
| PNEC : | 4.44 mg/kg |
| Environmental compartment: | Waste water treatment plant. |
| PNEC : | 1000 mg/l |

**8.2. Exposure controls**

**Personal protection measures, such as personal protective equipment**

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

**- Eye / face protection**

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

Do not spray in the direction of the eyes.

**- Hand protection**

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Butyl Rubber (Isobutylene-isoprene copolymer)

Recommended properties :

- Impervious gloves in accordance with standard EN374

**- Body protection**

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**- Respiratory protection**

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

Do not breathe spray. Use only in well-ventilated areas.

**Exposure controls linked to environmental protection**

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.

## SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

**General information :**

| | |
|---|---|
| Physical state : | Fluid liquid. |
| | Spray. |
| Color : | Colourless, clear |
| Odour : | Weak characteristic odour |

**Important health, safety and environmental information**

| | |
|---|---|
| pH : | Not relevant. |
| Vapour pressure (50°C) : | Not relevant. |
| Density : | 1.021 |
| Water solubility : | Soluble. |
| Viscosity: | v < 7 mm2/s (40°C) |
| Chemical combustion heat : | Not specified. |
| Inflammation time : | Not specified. |
| Deflagration density : | Not specified. |
| Inflammation distance : | Not specified. |
| Flame height : | Not specified. |
| Flame duration : | Not specified. |

### 9.2. Other information

| | |
|---|---|
| VOC (g/l) : | 990.37 |
| Pressure at 20°C : | ± 4.5 bar |
| Pressure at 50°C : | < 10 bar |
| Water content : | < 0.3 % w/w |

## SECTION 10 : STABILITY AND REACTIVITY

### 10.1. Reactivity

Reacts violently with oxidizing agents and strong acids. Reacts violently with : Calcium hypochlorite. Reacts with : Metals, Copper, Synthetic material.

### 10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

### 10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

Under normal conditions of storage and use, hazardous reactions will not occur.

Hazardous reactions : May form peroxides.

### 10.4. Conditions to avoid

Any apparatus likely to produce a flame or to have a metallic surface at high temperature (burners, electric arcs, furnaces etc.) must not be allowed on the premises.

Avoid :

- heat
- flames and hot surfaces
- humidity

Protect from sunlight and do not expose to temperatures exceeding 50°C. Keep away from heat and sources of ignition. Storage in a dry, frost-free and well ventilated place.

### 10.5. Incompatible materials

Keep away from :

- strong acids
- oxidising agents
- calcium hypochlorite
- metals
- copper, synthetic material

### 10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO2)
- aldehydes
- ketones
- organic acids

The product is stable. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11 : TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Splashes in the eyes may cause irritation and reversible damage

Suspected human reproductive toxicant.

Suspected of damaging the unborn child.

#### 11.1.1. Substances

**Acute toxicity :**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| Oral route : | LD50 > 5000 mg/kg<br>Species : Rat |
| Dermal route : | LD50 > 5000 mg/kg<br>Species : Rabbit |

**Skin corrosion/skin irritation :**

2-(2-Methoxyethoxy)ethanol : Repeated exposure may cause skin dryness or cracking.

**Serious damage to eyes/eye irritation :**

2-(2-Methoxyethoxy)ethanol : Not irritating.

**Respiratory or skin sensitisation :**

2-(2-Methoxyethoxy)ethanol : Not sensitizing.

**Germ cell mutagenicity :**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

No mutagenic effect.

**Carcinogenicity :**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| Carcinogenicity Test : | Negative. |
| | No carcinogenic effect. |

**Reproductive toxicant :**

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

Suspected of damaging the unborn child.

**Specific target organ systemic toxicity - single exposure :**

2-(2-Methoxyethoxy)ethanol : To human : Not classified for organ toxicity. For animals : No effects known.

**Specific target organ systemic toxicity - repeated exposure :**

2-(2-Methoxyethoxy)ethanol : To human : Not classified for organ toxicity. For animals : No effects known.

**Aspiration hazard :**

2-(2-Methoxyethoxy)ethanol : Not considered hazardous.

#### 11.1.2. Mixture

No toxicological data available for the mixture.

## SECTION 12 : ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### 12.1.1. Substances

CARBON DIOXIDE (CAS: 124-38-9)

| | |
|---|---|
| Fish toxicity : | LC50 = 35 mg/l<br>Species : Oncorhynchus mykiss |

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| Fish toxicity : | LC50 = 5741 mg/l<br>Species : Pimephales promelas<br>Duration of exposure : 96 h |
| Crustacean toxicity : | EC50 = 1192 mg/l<br>Species : Daphnia magna<br>Duration of exposure : 48 h |
| Algae toxicity : | ECr50 > 1000 mg/l<br>Species : Pseudokirchnerella subcapitata<br>Duration of exposure : 72 h |

#### 12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

### 12.2. Persistence and degradability

#### 12.2.1. Substances

CARBON DIOXIDE (CAS: 124-38-9)

| | |
|---|---|
| Biodegradability : | no degradability data is available, the substance is considered as not degrading quickly. |

2-(2-METHOXYETHOXY)ETHANOL (CAS: 111-77-3)

| | |
|---|---|
| Biodegradability : | Fast degrading. |

### 12.3. Bioaccumulative potential

Carbon dioxide : Not bioaccumulable.

2-(2-Methoxyethoxy)ethanol : Low potential to bioaccumulate.

### 12.4. Mobility in soil

Carbon dioxide : No data available.

2-(2-Methoxyethoxy)ethanol : Completely soluble in water.

### 12.5. Results of PBT and vPvB assessment

2-(2-Methoxyethoxy)ethanol : PBT/vPvB : No.

### 12.6. Other adverse effects

Carbon dioxide : Global warming potential. Not dangerous for the ozone layer.

## SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

### 13.1. Waste treatment methods

Do not pour into drains or waterways.

**Waste :**

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

**Soiled packaging :**

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

## SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

### 14.1. UN number

1950

### 14.2. UN proper shipping name

UN1950=AEROSOLS, flammable

### 14.3. Transport hazard class(es)

- Classification :

2.1

ADR/RID Label : Limited Quantity : 2.1 is not applicable.

### 14.4. Packing group

-

### 14.5. Environmental hazards

### 14.6. Special precautions for user

| ADR/RID | Class | Code | Pack gr. | Label | Ident. | LQ | Provis. | EQ | Cat. | Tunnel |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2 | 5F | - | 2.1 | - | 1 L | 190 327 344 625 | E0 | 2 | D |

| IMDG | Class | 2°Label | Pack gr. | LQ | EMS | Provis. | EQ |
|---|---|---|---|---|---|---|---|
| | 2.1 | See SP63 | - | SP277 | F-D,S-U | 63 190 277 327 344 959 | E0 |

| IATA | Class | 2°Label | Pack gr. | Passager | Passager | Cargo | Cargo | note | EQ |
|---|---|---|---|---|---|---|---|---|---|
| | 2.1 | - | - | 203 | 75 kg | 203 | 150 kg | A145 A167 A145 A167 A802 | E0 |
| | 2.1 | - | - | Y203 | 30 kg G | - | - | A145 A167 A802 | E0 |

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available.

## SECTION 15 : REGULATORY INFORMATION

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

**- Classification and labelling information included in section 2:**

The following regulations have been used:

- Directive 67/548/EEC and its adaptations
- Directive 1999/45/EC and its adaptations
- Directive 75/734/CEE modified by directive 2013/10/UE
- EU Regulation No. 1272/2008 amended by EU Regulation No. 487/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 758/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 944/2013.
- EU Regulation No. 1272/2008 amended by EU Regulation No. 605/2014.

**- Container information:**

No data available.

**- Particular provisions :**

No data available.

### 15.2. Chemical safety assessment

A chemical safety assessment has been carried out for the following products or for the substances in these products :

2-(2-Methoxyethoxy)ethanol

## SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

**Title for H, EUH and R indications mentioned in section 3 :**

| | |
|---|---|
| H281 | Contains refrigerated gas; may cause cryogenic burns or injury. |
| H361d | Suspected of damaging the unborn child. |
| R 63.G3 | Possible risk of harm to the unborn child. |

**Abbreviations :**

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

CMR: Carcinogenic, mutagenic or reprotoxic.

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefahrdungsklasse (Water Hazard Class).

GHS02 : Flame

GHS08 : Health hazard