

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Trade name : GAS CARTRIDGE Propane/Butane/Propene  
Product code : 521516  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

Intended for general public  
Main use category : Consumer use, Professional use  
Use of the substance/mixture : Welding and soldering products, flux products  
Excludes 'Metal surface treatment products' and 'Metal working fluids'.  
Function or use category : Welding and soldering agents

##### 1.2.2. Uses advised against

No additional information available

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

VIRAX SAS  
39, quai Marne - CS 40197  
FR- 51206 EPERNAY Cedex  
T +33 (0)3 26 59 56 56 - F +33 (0)3 26 59 56 60  
[hse@virax.com](mailto:hse@virax.com)

#### 1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable gases, Category 1A H220  
Gases under pressure : Liquefied gas H280  
Serious eye damage/eye irritation, Category 2 H319  
Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Contains gas under pressure; may explode if heated. Extremely flammable gas. May cause drowsiness or dizziness. Causes serious eye irritation.

#### 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02

GHS07

Signal word (CLP) :

Danger

Contains

acetone; propan-2-one; propanone

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Hazard statements (CLP)	: H220 - Extremely flammable gas. H280 - Contains gas under pressure; may explode if heated. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.
Precautionary statements (CLP)	: P102 - Keep out of reach of children. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 - In case of leakage, eliminate all ignition sources. P403 - Store in a well-ventilated place. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.
Child-resistant fastening	: Not applicable
Tactile warning	: Applicable

### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

Contains no PBT/vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

Component	
Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).] (68476-85-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).] (Note K)(Note S)(Note U)	CAS-No.: 68476-85-7 EC-No.: 270-704-2 EC Index-No.: 649-202-00-6 REACH-no: 01-2119485911-31	$\geq 70 - \leq 85$	Flam. Gas 1, H220 Press. Gas (Liq.), H280 Muta. Not classified Carc. Not classified
acetone; propan-2-one; propanone substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8 REACH-no: 01-2119471330-49	$\geq 15 - < 25$	Not determined

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pentane substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit (Note C)	CAS-No.: 109-66-0 EC-No.: 203-692-4 EC Index-No.: 601-006-00-1	≥ 1 – < 3	Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 Aquatic Chronic 2, H411 EUH066
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Note C - Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Note K - The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.

Note S - This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).

Note U - When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.), Press. Gas (Liq.), Press. Gas (Ref. Liq.), Press. Gas (Diss.). Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

Full text of H- and EUH-statements: see section 16

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a poison center or a doctor if you feel unwell. If medical advice is needed, have product container or label at hand.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: In case of frostbite spray with water for at least 15 minutes. Apply a sterile dressing. Obtain medical assistance. Remove contaminated clothing. On frostbite: rinse with plenty of water, do NOT remove clothes.
First-aid measures after eye contact	: 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.
First-aid measures after ingestion	: Ingestion unlikely. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects	: May cause drowsiness or dizziness.
Symptoms/effects after skin contact	: Repeated exposure may cause skin dryness or cracking. Contact with the liquefied gas may cause frostbite.
Symptoms/effects after eye contact	: Eye irritation.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

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

Fire hazard	: Extremely flammable gas.
Explosion hazard	: Heating will cause a rise in pressure with a risk of bursting.
Hazardous decomposition products in case of fire	: Thermal decomposition generates : Carbon dioxide. fume. Carbon monoxide.

#### 5.3. Advice for firefighters

Precautionary measures fire	: Use fire control measures appropriate for the surrounding fire. Exposure to fire and heat radiation may cause gas receptacles to rupture. Cool endangered receptacles with water spray jet from a protected position. Prevent water used in emergency cases from entering sewers and drainage systems.
Firefighting instructions	: Eliminate all ignition sources if safe to do so. Leaking gas fire: Do not extinguish, unless leak can be stopped safely.

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Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

### SECTION 6: Accidental release measures

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

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate area. No open flames, no sparks, and no smoking. Do not breathe gas. Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site. Turn leaking containers leak-side up to prevent the escape of liquid.

#### 6.4. Reference to other sections

For further information refer to section 13. See Section 8.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Do not breathe gas.  
Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Eliminate all ignition sources if safe to do so. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Wear personal protective equipment.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Store in a well-ventilated place. Store locked up. Keep container tightly closed. Keep cool.  
Incompatible materials : Heat sources. Direct sunlight. Sources of ignition.  
Storage temperature : < 50 °C

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

See Section 1.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

<b>acetone; propan-2-one; propanone (67-64-1)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Acetone
IOEL TWA	1210 mg/m <sup>3</sup>
IOEL TWA [ppm]	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Acetone
WEL TWA (OEL TWA) [1]	1210 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	500 ppm

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WEL STEL (OEL STEL)	3620 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	1500 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

### pentane (109-66-0)

#### EU - Indicative Occupational Exposure Limit (IOEL)

Local name	Pentane
IOEL TWA	3000 mg/m <sup>3</sup>
IOEL TWA [ppm]	1000 ppm
Regulatory reference	COMMISSION DIRECTIVE 2006/15/EC

#### United Kingdom - Occupational Exposure Limits

Local name	Pentane
WEL TWA (OEL TWA) [1]	1800 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	600 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

**Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).] (68476-85-7)**

#### United Kingdom - Occupational Exposure Limits

Local name	Liquefied petroleum gas
WEL TWA (OEL TWA) [1]	1750 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	1000 ppm
WEL STEL (OEL STEL)	2180 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	1250 ppm
Remark	Carc (Capable of causing cancer and/or heritable genetic damage (only applies if LPG contains more than 0.1% of buta-1,3-diene))
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

### acetone; propan-2-one; propanone (67-64-1)

#### DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	2420 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	186 mg/kg bw/day
Long-term - systemic effects, inhalation	1210 mg/m <sup>3</sup>

#### DNEL/DMEL (General population)

Long-term - systemic effects, oral	62 mg/kg bw/day
Long-term - systemic effects, inhalation	200 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	62 mg/kg bw/day

#### PNEC (Water)

PNEC aqua (freshwater)	10,6 mg/l
PNEC aqua (marine water)	1,06 mg/l

#### PNEC (Sediment)

PNEC sediment (freshwater)	30,4 mg/kg dwt
PNEC sediment (marine water)	30,4 mg/kg dwt

#### PNEC (Soil)

PNEC soil	29,5 mg/kg dwt
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### pentane (109-66-0)

#### DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	432 mg/kg bw/day
Long-term - systemic effects, inhalation	3000 mg/m <sup>3</sup>

#### DNEL/DMEL (General population)

Long-term - systemic effects, oral	214 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	643 mg/kg bw/day
Long-term - systemic effects, dermal	214 mg/kg bodyweight/day

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<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0,23 mg/l
PNEC aqua (marine water)	0,23 mg/l
PNEC aqua (intermittent, freshwater)	0,88 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	1,2 mg/kg dwt
PNEC sediment (marine water)	1,2 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0,55 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	3,6 mg/l

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Only experienced and properly instructed persons should handle gases under pressure.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Industrial and professional. Perform risk assessment prior to use. Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

#### Personal protective equipment symbol(s):



#### 8.2.2.1. Eye and face protection

##### Eye protection:

Safety glasses. Use eye protection according to EN 166, designed to protect against liquid splashes.

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Wear suitable protective clothing

##### Hand protection:

Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Time of penetration is to be checked with the glove producer. Wear cold insulating gloves.

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### 8.2.2.4. Thermal hazards

##### Thermal hazard protection:

Contact with the product may cause cold burns or frostbite.

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment. Inform the responsible authorities in case of gas leakage, or of entry into waterways, soil or drains.

## SECTION 9: Physical and chemical properties

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

Physical state : Gas  
Colour : Colourless.

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Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: -0,5 °C
Flammability	: Extremely flammable gas.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: -74 °C
Auto-ignition temperature	: 365 °C
Decomposition temperature	: Not available
pH	: Not applicable
Viscosity, kinematic	: Not applicable
Solubility	: In water, material is partially soluble.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: Not applicable
Relative density	: Not applicable
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

Gas group : Press. Gas (Liq.)

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Extremely flammable gas. The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

Oxidizing agent. Halogens.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	: Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	: Not classified (Based on available data, the classification criteria are not met)

<b>acetone; propan-2-one; propanone (67-64-1)</b>	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	7400 mg/kg
LC50 Inhalation - Rat	76 mg/l

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<b>pentane (109-66-0)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight
LC50 Inhalation - Rat (Vapours)	> 25,3 mg/l/4h
Skin corrosion/irritation	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: May cause frostbite Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: May cause drowsiness or dizziness.

<b>acetone; propan-2-one; propanone (67-64-1)</b>	
STOT-single exposure	May cause drowsiness or dizziness.

<b>pentane (109-66-0)</b>	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

No additional information available

#### 11.2.2. Other information

Potential adverse human health effects and symptoms : May cause frostbite, May cause suffocation by reducing oxygen available for breathing

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Ecology - water	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

<b>acetone; propan-2-one; propanone (67-64-1)</b>	
LC50 - Fish [1]	5540 mg/l Oncorhynchus mykiss (Rainbow trout)
LC50 - Fish [2]	11000 mg/l Alburnus alburnus, sea water
EC50 - Crustacea [1]	23,5 mg/l EC50 48h - Daphnia magna [mg/l]
NOEC chronic crustacea	2212 mg/l Daphnia magna (Water flea)

<b>pentane (109-66-0)</b>	
EC50 - Crustacea [1]	9,74 mg/l

<b>Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).] (68476-85-7)</b>	
LC50 - Fish [1]	> 1000 mg/l

### 12.2. Persistence and degradability

<b>GAS CARTRIDGE Propane/Butane/Propene</b>	
Persistence and degradability	Product evaporates rapidly when in contact with the air.

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<b>acetone; propan-2-one; propanone (67-64-1)</b>	
Persistence and degradability	Readily biodegradable.
<b>pentane (109-66-0)</b>	
Biodegradation	> 87 % (OECD 301F method)

### 12.3. Bioaccumulative potential

<b>acetone; propan-2-one; propanone (67-64-1)</b>	
Bioconcentration factor (BCF REACH)	3 (calculated value)
<b>pentane (109-66-0)</b>	
Bioconcentration factor (BCF REACH)	171
Partition coefficient n-octanol/water (Log Pow)	3,39
Bioaccumulative potential	High potential (3).

### 12.4. Mobility in soil

<b>pentane (109-66-0)</b>	
Surface tension	0,01547 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	80

### 12.5. Results of PBT and vPvB assessment

<b>GAS CARTRIDGE Propane/Butane/Propene</b>	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Ensure all national/local regulations are observed.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of this material and its container at hazardous or special waste collection point. Container under pressure. Do not drill or burn even after use. Empty the packaging completely prior to disposal.
European List of Waste (LoW) code	: Code Waste to be completed according to the use and the list of Decision 2000/352 / EC 16 05 04* - gases in pressure containers (including halons) containing dangerous substances
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

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### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 2037	UN 2037	UN 2037	UN 2037	UN 2037
<b>14.2. UN proper shipping name</b>				
RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	Gas cartridges	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)	RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES)
<b>Transport document description</b>				
UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES), 2.1, (D)	UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES), 2.1	UN 2037 Gas cartridges, 2.1	UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES), 2.1	UN 2037 RECEPTACLES, SMALL, CONTAINING GAS (GAS CARTRIDGES), 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR) : 5F  
Special provisions (ADR) : 191, 303, 344  
Limited quantities (ADR) : 1I  
Excepted quantities (ADR) : E0  
Packing instructions (ADR) : P003  
Special packing provisions (ADR) : PP17, RR6  
Mixed packing provisions (ADR) : MP9  
Transport category (ADR) : 2  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV9, CV12  
Special provisions for carriage - Operation (ADR) : S2  
Tunnel restriction code (ADR) : D

#### Transport by sea

Special provisions (IMDG) : 191, 277, 303, 344  
Packing instructions (IMDG) : P003  
Special packing provisions (IMDG) : PP17  
EmS-No. (Fire) : F-D  
EmS-No. (Spillage) : S-U  
Stowage category (IMDG) : B  
Stowage and handling (IMDG) : SW2  
Properties and observations (IMDG) : Normally contain mixtures of liquefied Butane and Propane in various proportions for use in camping stoves, etc.

#### Air transport

PCA Excepted quantities (IATA) : E0  
PCA Limited quantities (IATA) : Y203  
PCA limited quantity max net quantity (IATA) : 1kg  
PCA packing instructions (IATA) : 203

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PCA max net quantity (IATA) : 1kg  
CAO packing instructions (IATA) : 203  
CAO max net quantity (IATA) : 15kg  
Special provisions (IATA) : A145, A167, A802  
ERG code (IATA) : 10L

### Inland waterway transport

Classification code (ADN) : 5F  
Special provisions (ADN) : 191, 303, 327, 344  
Limited quantities (ADN) : 1 L  
Excepted quantities (ADN) : E0  
Equipment required (ADN) : PP, EX, A  
Ventilation (ADN) : VE01  
Number of blue cones/lights (ADN) : 1

### Rail transport

Classification code (RID) : 5F  
Special provisions (RID) : 191, 303, 344  
Limited quantities (RID) : 1L  
Excepted quantities (RID) : E0  
Packing instructions (RID) : P003  
Special packing provisions (RID) : PP17, RR6  
Mixed packing provisions (RID) : MP9  
Transport category (RID) : 2  
Special provisions for carriage - Loading, unloading and handling (RID) : CW9, CW12  
Colis express (express parcels) (RID) : CE2  
Hazard identification number (RID) : 23

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	acetone; propan-2-one; propanone ; pentane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
3(b)	acetone; propan-2-one; propanone ; pentane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	pentane	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

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40.	acetone; propan-2-one; propanone ; pentane ; Petroleum gases, liquefied; Petroleum gas; [A complex combination of hydrocarbons produced by the distillation of crude oil. It consists of hydrocarbons having carbon numbers predominantly in the range of C3 through C7 and boiling in the range of approximately– 40°C to 80°C (– 40°F to 176°F).]	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
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Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Contains substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

### ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

Name	CAS-No.	Combined Nomenclature code (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code
Acetone	67-64-1	2914 11 00	ex 3824 99 92

Please see [https://ec.europa.eu/home-affairs/system/files/2021-11/list\\_of\\_competent\\_authorities\\_and\\_national\\_contact\\_points\\_en.pdf](https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf)

### Directive 2012/18/EU (SEVESO III)

Seveso Additional information

: FLAMMABLE GASES

Flammable gases, Category 1 or 2

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Name	CN designation	CAS-No.	CN code	Category	Threshold	Annex
Acetone		67-64-1	2914 11 00	Category 3		Annex I

### 15.1.2. National regulations

Ensure all national/local regulations are observed

France
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### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.1	Name	Modified	
1.1	Trade name	Added	
13.1	H code	Modified	
16	Data sources	Modified	

Abbreviations and 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

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ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
IARC	International Agency for Research on Cancer
LC50	Median lethal concentration
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
EC50	Median effective concentration
SDS	Safety Data Sheet
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
TRGS	Technical Rules for Hazardous Substances
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disrupting properties
IOELV	Indicative Occupational Exposure Limit Value
WGK	Water Hazard Class

Data sources	: 15 ATP Inserted / Updated. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 . Supplier's safety documents.
Training advice	: Normal use of this product shall imply use in accordance with the instructions on the packaging.
Other information	: Ensure all national/local regulations are observed. DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
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Asp. Tox. 1	Aspiration hazard, Category 1
Carc. Not classified	Carcinogenicity Not classified
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1	Flammable gases, Category 1
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
H220	Extremely flammable gas.
H225	Highly flammable liquid and vapour.
H280	Contains gas under pressure; may explode if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
Muta. Not classified	Germ cell mutagenicity Not classified
Press. Gas (Liq.)	Gases under pressure : Liquefied gas
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

### Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Flam. Gas 1A	H220	On basis of test data
Press. Gas (Liq.)	H280	On basis of test data
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.