



**Safety Data Sheet dated 29/1/2025, version 5**

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

- 1.1. Product identifier  
Mixture identification:  
Trade name: PURI CLIMA  
Trade code: 4138
- 1.2. Relevant identified uses of the substance or mixture and uses advised against  
Recommended use:  
Detergent/cleaner  
Uses advised against:  
Strictly adhere to the recommended uses.
- 1.3. Details of the supplier of the safety data sheet  
Supplier:  
Arexons S.p.A.  
via Antica di Cassano, 23, 20063  
Cernusco sul Naviglio (MI), Italy  
Arexons S.p.A.  
Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306  
Competent person responsible for the safety data sheet:  
arexons@arexons.it
- 1.4. Emergency telephone number  
Arexons S.p.A.  
Tel. +39 (0)2/924361 - Fax +39 (0)2/92436306  
In England and Wales: NHS 111 - dial 111  
In Scotland: NHS 24 - dial 111  
In Ireland: emergency number 112  
In South Africa: Poison Information Helpline 0861 555 777  
In Malta: emergency number 112

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**SECTION 2: Hazards identification**

- 2.1. Classification of the substance or mixture  
EC regulation criteria 1272/2008 (CLP):  
⚠ Danger, Aerosols 1, Extremely flammable aerosol. Pressurized container: may burst if heated.  
Adverse physicochemical, human health and environmental effects:  
No other hazards
- 2.2. Label elements  
Hazard pictograms:



Danger

- Hazard statements:  
H222, H229 Extremely flammable aerosol. Pressurized container: may burst if heated.
- Precautionary statements:  
P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.  
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.

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P251 Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

Special Provisions:

None

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

Regulation (EC) nr 648/2004 (detergents).

Product contents:

Aliphatic hydrocarbons

> 30 %

Non-ionic surfactants

< 5 %

The product also contains: Perfumes

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration  $\geq 0.1\%$

Other Hazards:

No other hazards

## SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

stta	Name	Ident. Number		Classification
$\geq 30\%$ - $< 35\%$	Hydrocarbons, C3-4; Petroleum gas	Index number: CAS: EC: REACH No.:	649-199-00-1 68476-40-4 270-681-9 01- 2119486557 -22	<div> <div> </div> <div> </div> </div> 2.2/1A Flam. Gas 1A H220 2.5/L Press Gas (Liq.) H280 DECLK (CLP)*
$\geq 0,001\%$ - $< 0,$ 005%	sodium hydroxide; caustic soda	Index number: CAS: EC: REACH No.:	011-002-00-6 1310-73-2 215-185-5 01- 2119457892 -27	<div> <div> </div> <div> </div> </div> 3.2/1A Skin Corr. 1A H314 3.3/1 Eye Dam. 1 H318 2.16/1 Met. Corr. 1 H290 Specific Concentration Limits: C $\geq 5\%$ : Skin Corr. 1A H314 2% $\leq$ C $< 5\%$ : Skin Corr. 1B H314 0,5% $\leq$ C $< 2\%$ : Skin Irrit. 2 H315 0,5% $\leq$ C $< 2\%$ : Eye Irrit. 2 H319
332 ppb	ethyl acetate	Index number: CAS: EC: REACH No.:	607-022-00-5 141-78-6 205-500-4 01- 2119475103 -46	<div> <div> </div> <div> </div> </div> 2.6/2 Flam. Liq. 2 H225 3.3/2 Eye Irrit. 2 H319 3.8/3 STOT SE 3 H336 EUH066
249 ppb	DYPHENYL OXYDE	CAS: EC:	101-84-8 202-981-2	<div> <div> </div> <div> </div> </div> 3.3/2 Eye Irrit. 2 H319 3.7/1B Repr. 1B H360Fd 4.1/A1 Aquatic Acute 1 H400
$< 1$ ppb	isopentyl acetate [2]	CAS:	123-92-2	<div> <div> </div> <div> </div> </div> 2.6/3 Flam. Liq. 3 H226

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		EC: 204-662-3 REACH No.: 01-2119548408-32	EUH066
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\*DECLK (CLP): Substance classified in accordance with Note K, Annex VI of EC Regulation (EC) 1272/2008. 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.

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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

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#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

Appropriate Extinguishing Media:

To carbon dioxide.

To dust.

Foam for alcohols

Water spray.

Not Recommended Extinguishing Media:

Do not use direct water jets.

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

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

##### 5.3. Advice for firefighters

Normal fire-fighting clothing, such as an open-circuit compressed air breathing apparatus (EN 137), flame-resistant suit (EN469), flame-resistant gloves (EN 659) and firefighter's boots (HO A29 or A30).

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#### SECTION 6: Accidental release measures

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

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.



See protective measures under point 7 and 8.

**6.2. Environmental precautions**

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

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

For cleaning up:

Avoid flame and/or spark near leak and produced waste. Do not smoke. In case of large spills dike,

absorb and shovel up into suitable containers for disposal. Contain small spills with absorbent material.

Put dirty material in suitable container. Dispose of dirty material in accordance with local or national regulations.

**6.4. Reference to other sections**

See also section 8 and 13

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**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

See also section 8 for recommended protective equipment.

Advice on general occupational hygiene:

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

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

Only store in the original container.

Store at below 50 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

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

None in particular

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**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

Hydrocarbons, C3-4; Petroleum gas - CAS: 68476-40-4

MAK - TWA: 2400 mg/m<sup>3</sup>, 1000 ppm

TLV TWA - 1900 mg/m<sup>3</sup>, 800 ppm

sodium hydroxide; caustic soda - CAS: 1310-73-2

20101.10 - TWA: 2 mg/m<sup>3</sup>

ACGIH - STEL: Ceiling 2 mg/m<sup>3</sup> - Notes: URT, eye, and skin irr

ethyl acetate - CAS: 141-78-6

ACGIH - TWA(8h): 400 ppm - Notes: URT and eye irr

EU - TWA(8h): 734 mg/m<sup>3</sup>, 200 ppm - STEL: 1468 mg/m<sup>3</sup>, 400 ppm

DYPHENYL OXYDE - CAS: 101-84-8

ACGIH - TWA(8h): 1 ppm - STEL: 2 ppm - Notes: (V) - URT and eye irr, nausea

EU - TWA(8h): 7 mg/m<sup>3</sup>, 1 ppm - STEL: 14 mg/m<sup>3</sup>, 2 ppm

isopentyl acetate [2] - CAS: 123-92-2

EU - TWA(8h): 270 mg/m<sup>3</sup>, 50 ppm - STEL: 540 mg/m<sup>3</sup>, 100 ppm

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ACGIH - TWA(8h): 50 ppm - STEL: 100 ppm - Notes: URT irr  
DNEL Exposure Limit Values  
sodium hydroxide; caustic soda - CAS: 1310-73-2  
Worker Professional: 1 mg/m<sup>3</sup> - Consumer: 1 mg/m<sup>3</sup> - Exposure: Human Inhalation -  
Frequency: Long Term, systemic effects  
PNEC Exposure Limit Values  
N.A.  
8.2. Exposure controls  
Eye protection:  
Safety goggles.  
Compliant with EN 166  
Protection for skin:  
protective clothing  
Protection for hands:  
Nitrile or Viton gloves.  
Compliant with EN 374.  
Thickness: Cuff 0.10 mm; Palm 0.12 mm; Fingers 0.145 mm  
Respiratory protection:  
Use a suitable respiratory protection device.  
Thermal Hazards:  
None  
Environmental exposure controls:  
None  
Appropriate engineering controls:  
None

## SECTION 9: Physical and chemical properties

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

Properties	Value	Method:	Notes:
Physical state:	Liquid	--	--
Colour:	Colourless	--	--
Odour:	Characteristic	--	--
Melting point/freezing point:	N.A.	--	--
Boiling point or initial boiling point and boiling range:	N.A.	--	--
Flammability:	Flammable	--	--
Lower and upper explosion limit:	N.A.	--	--
Flash point:	Not Relevant	--	--
Auto-ignition temperature:	N.A.	--	--
Decomposition temperature:	N.A.	--	--
pH:	8	ASTM D1287	--
Kinematic viscosity:	N.A.	--	--

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Solubility in water:	N.A.	--	--
Solubility in oil:	N.A.	--	--
Partition coefficient n-octanol/water (log value):	N.A.	--	--
Vapour pressure:	N.A.	--	--
Density and/or relative density:	1 g/cm3	ASTM D 4052-96	--
Relative vapour density:	N.A.	--	--
Particle characteristics:			
Particle size:	N.A.	--	--

- 9.2. Other information  
No other relevant information

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## SECTION 10: Stability and reactivity

- 10.1. Reactivity  
Stable under normal conditions
- 10.2. Chemical stability  
Stable at normal ambient temperatures and when used as recommended.
- 10.3. Possibility of hazardous reactions  
It may generate flammable gases on contact with dithiocarbamates, mercaptans and other organic sulphides, elementary metals (alkalis, alkaline earth, powder alloys, vapours), and powerful reducing agents.  
It may generate toxic gases on contact with inorganic fluorides, halogenated organic substances, sulphides, nitrides, nitriles, organophosphates, and powerful oxidising agents.  
It may catch fire on contact with dithiocarbamates, elementary metals (alkali, alkaline earth, powder alloys, vapours, sheets or bars), and nitrides.
- 10.4. Conditions to avoid  
Excessive heat.
- 10.5. Incompatible materials  
Avoid contact with combustible materials. The product could catch fire.
- 10.6. Hazardous decomposition products  
None.

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## SECTION 11: Toxicological information

- 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008  
Toxicological information of the product:  
PURI CLIMA SPRAY 350 ML
  - a) acute toxicity  
Not classified  
Based on available data, the classification criteria are not met
  - b) skin corrosion/irritation  
Not classified  
Based on available data, the classification criteria are not met
  - c) serious eye damage/irritation  
Not classified  
Based on available data, the classification criteria are not met
  - d) respiratory or skin sensitisation

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- Not classified  
Based on available data, the classification criteria are not met
- e) germ cell mutagenicity  
Not classified  
Based on available data, the classification criteria are not met
- f) carcinogenicity  
Not classified  
Based on available data, the classification criteria are not met
- g) reproductive toxicity  
Not classified  
Based on available data, the classification criteria are not met
- h) STOT-single exposure  
Not classified  
Based on available data, the classification criteria are not met
- i) STOT-repeated exposure  
Not classified  
Based on available data, the classification criteria are not met
- j) aspiration hazard  
Not classified  
Based on available data, the classification criteria are not met
- Toxicological information of the main substances found in the product:  
N.A.
- 11.2. Information on other hazards  
Endocrine disrupting properties:  
No endocrine disruptor substances present in concentration  $\geq 0.1\%$

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## SECTION 12: Ecological information

- 12.1. Toxicity  
Adopt good working practices, so that the product is not released into the environment.  
Hydrocarbons, C3-4; Petroleum gas - CAS: 68476-40-4
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Daphnia = 14.22 mg/l - Duration h: 48  
sodium hydroxide; caustic soda - CAS: 1310-73-2
- a) Aquatic acute toxicity:  
Endpoint: EC50 - Species: Daphnia 40.4 mg/l - Duration h: 48  
DYPHENYL OXYDE - CAS: 101-84-8
- a) Aquatic acute toxicity:  
Endpoint: LC50 - Species: Fish 2 mg/l - Duration h: 72  
Endpoint: EC50 - Species: Daphnia 1.57 mg/l - Duration h: 48  
Endpoint: EC50 - Species: Algae 2 Ppm - Duration h: 96
- 12.2. Persistence and degradability  
None  
ethyl acetate - CAS: 141-78-6  
Biodegradability: Readily biodegradable
- 12.3. Bioaccumulative potential  
ethyl acetate - CAS: 141-78-6  
Test: Kow - Partition coefficient 0.68  
Test: BCF - Bioconcentration factor 30
- 12.4. Mobility in soil  
N.A.
- 12.5. Results of PBT and vPvB assessment  
vPvB Substances: None - PBT Substances: None
- 12.6. Endocrine disrupting properties  
No endocrine disruptor substances present in concentration  $\geq 0.1\%$
- 12.7. Other adverse effects  
None





### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

#### Additional disposal information:

Reuse if possible. Act in accordance with the local and national laws in force.

"Use in accordance with good working practices, avoiding dispersal in the environment.

Do not discharge into drains, ground water or water courses. Comply with current legislation on the protection of water and soil from pollution (Legislative Decree No. 152 of 3/4/2006).

Dispose of used product and containers by handing them over to authorised companies, in accordance with the provisions of

Legislative Decree No. 152/2006 (Consolidated Environmental Act, which replaced the Ronchi Decree) as amended.

The used product is to be considered special waste to be classified in accordance with Directive No. 2008/98/EC on waste and related matters. Recover if possible. Send to authorised disposal plants or incineration under controlled conditions (152/2006 art. 184).

Act in accordance with the local and national laws in force.

Contaminated packaging must be emptied as far as possible. After cleaning, send to an authorised centre for recycling or disposal."

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### SECTION 14: Transport information



#### 14.1. UN number or ID number

ADR-UN Number: 1950

IATA-UN Number: 1950

IMDG-UN Number: 1950

#### 14.2. UN proper shipping name

ADR-Shipping Name: AEROSOLS, flammable

IATA-Shipping Name: AEROSOLS, flammable

IMDG-Shipping Name: AEROSOLS, flammable

#### 14.3. Transport hazard class(es)

ADR-Class: 2

ADR - Hazard identification number: -

IATA-Class: 2

IATA-Label: 2.1

IMDG-Class: 2

Sea (IMO): 2

#### 14.4. Packing group

ADR-Packing Group: -

IATA-Packing group: -

IMDG-Packing group: -

#### 14.5. Environmental hazards

ADR-Environmental Pollutant: No

IMDG-Marine pollutant: No

IMDG-EmS: F-D,  
S-U

#### 14.6. Special precautions for user

ADR-Subsidiary hazards: See SP63

ADR-S.P.: 190 327 344 625

ADR-Transport category (Tunnel restriction code): 2 (D)



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IATA-Passenger Aircraft: 203  
IATA-Subsidiary hazards: See SP63  
IATA-Cargo Aircraft: 203  
IATA-S.P.: A145 A167 A802  
IATA-ERG: 10L  
IMDG-Subsidiary hazards: See SP63  
IMDG-Stowage and handling: SW1 SW22  
IMDG-Segregation: SG69

- 14.7. Maritime transport in bulk according to IMO instruments  
N.A.  
Limited Quantity: 1 L  
Exempted Quantity: E0

#### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture  
Dir. 98/24/EC (Risks related to chemical agents at work)  
Dir. 2000/39/EC (Occupational exposure limit values)  
Regulation (EC) n. 1907/2006 (REACH)  
Regulation (EC) n. 1272/2008 (CLP)  
Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013  
Regulation (EU) n. 2020/878  
Regulation (EU) n. 286/2011 (ATP 2 CLP)  
Regulation (EU) n. 618/2012 (ATP 3 CLP)  
Regulation (EU) n. 487/2013 (ATP 4 CLP)  
Regulation (EU) n. 944/2013 (ATP 5 CLP)  
Regulation (EU) n. 605/2014 (ATP 6 CLP)  
Regulation (EU) n. 2015/1221 (ATP 7 CLP)  
Regulation (EU) n. 2016/918 (ATP 8 CLP)  
Regulation (EU) n. 2016/1179 (ATP 9 CLP)  
Regulation (EU) n. 2017/776 (ATP 10 CLP)  
Regulation (EU) n. 2018/669 (ATP 11 CLP)  
Regulation (EU) n. 2018/1480 (ATP 13 CLP)  
Regulation (EU) n. 2019/521 (ATP 12 CLP)  
Regulation (EU) n. 2020/217 (ATP 14 CLP)  
Regulation (EU) n. 2020/1182 (ATP 15 CLP)  
Regulation (EU) n. 2021/643 (ATP 16 CLP)  
Regulation (EU) n. 2021/849 (ATP 17 CLP)  
Regulation (EU) n. 2022/692 (ATP 18 CLP)

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

Restriction 3  
Restriction 40

Restrictions related to the substances contained:

Restriction 75

Volatile Organic compounds - VOCs = 34.01 %

Volatile Organic compounds - VOCs = 340.08 g/Kg

Volatile Organic compounds - VOCs = 340.08 g/l

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)

Regulation (EC) nr 648/2004 (detergents).

Dir. 2004/42/EC (VOC directive)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1

Product belongs to category: P3a

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#### 15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

Substances for which a Chemical Safety Assessment has been carried out:

Hydrocarbons, C3-4; Petroleum gas

### SECTION 16: Other information

Text of phrases referred to under heading 3:

H220 Extremely flammable gas.

H280 Contains gas under pressure; may explode if heated.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H290 May be corrosive to metals.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H225 Highly flammable liquid and vapour.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H360Fd May damage fertility. Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H226 Flammable liquid and vapour.

Hazard class and hazard category	Code	Description
Met. Corr. 1	2.16/1	Substance or mixture corrosive to metals, Category 1
Flam. Gas 1A	2.2/1A	Flammable gas, Category 1A
Aerosols 1	2.3/1	Aerosol, Category 1
Press Gas (Liq.)	2.5/L	Gases under pressure (Liquefied gas)
Flam. Liq. 2	2.6/2	Flammable liquid, Category 2
Flam. Liq. 3	2.6/3	Flammable liquid, Category 3
Skin Corr. 1A	3.2/1A	Skin corrosion, Category 1A
Skin Corr. 1B	3.2/1B	Skin corrosion, Category 1B
Skin Irrit. 2	3.2/2	Skin irritation, Category 2
Eye Dam. 1	3.3/1	Serious eye damage, Category 1
Eye Irrit. 2	3.3/2	Eye irritation, Category 2
Repr. 1B	3.7/1B	Reproductive toxicity, Category 1B
STOT SE 3	3.8/3	Specific target organ toxicity - single exposure, Category 3
Aquatic Acute 1	4.1/A1	Acute aquatic hazard, category 1

Paragraphs modified from the previous revision:

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SECTION 2: Hazards identification  
SECTION 3: Composition/information on ingredients  
SECTION 8: Exposure controls/personal protection  
SECTION 11: Toxicological information  
SECTION 12: Ecological information  
SECTION 15: Regulatory information  
SECTION 16: Other information

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Aerosols 1, H222, H229	On basis of test data

This document was prepared by a competent person who has received appropriate training.  
Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,  
Commission of the European Communities  
SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van  
Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
ATE: Acute Toxicity Estimate  
ATEmix: Acute toxicity Estimate (Mixtures)  
CAS: Chemical Abstracts Service (division of the American Chemical Society).  
CLP: Classification, Labeling, Packaging.  
DNEL: Derived No Effect Level.  
EINECS: European Inventory of Existing Commercial Chemical Substances.  
GefStoffVO: Ordinance on Hazardous Substances, Germany.  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
IATA: International Air Transport Association.  
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).  
ICAO: International Civil Aviation Organization.  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).  
IMDG: International Maritime Code for Dangerous Goods.  
INCI: International Nomenclature of Cosmetic Ingredients.  
KSt: Explosion coefficient.  
LC50: Lethal concentration, for 50 percent of test population.  
LD50: Lethal dose, for 50 percent of test population.  
NA: Not applicable  
PNEC: Predicted No Effect Concentration.  
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.  
STEL: Short Term Exposure limit.

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STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.

# Exposure Scenario, 17/07/2019

Substance identity	
Chemical name	IDROCARBURI C3-C4, Miscela (propano,butano,isobutano< 0,1% 1,3-Butadiene)
CAS No.	68476-40-4
EINECS No.	270-681-9

## Table of contents

1. **ES 1**      Use at industrial site

1. ES 1 Use at industrial site	
<b>1.1 TITLE SECTION</b>	
Exposure Scenario name	Use as a propellant
Date - Version	17/07/2019 - 1.0
Life Cycle Stage	Use at industrial site
Main user group	Industrial uses
Sector(s) of use	Industrial uses (SU3)
<b>Environment Contributing Scenario</b>	
CS1 Covered by	ERC4
<b>Worker Contributing Scenario</b>	
CS2 Propellant	PROC1 - PROC2 - PROC3 - PROC8b - PROC9 - PROC12
<b>1.2 Conditions of use affecting exposure</b>	
<b>1.2. CS1: Environment Contributing Scenario: Covered by (ERC4)</b>	
Environmental release categories	Use of non-reactive processing aid at industrial site (no inclusion into or onto article) (ERC4)
<b>1.2. CS2: Worker Contributing Scenario: Propellant (PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12)</b>	
Process Categories	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions - Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions - Manufacture or formulation in the chemical industry in closed batch processes with occasional controlled exposure or processes with equivalent containment condition - Transfer of substance or mixture (charging and discharging) at dedicated facilities - Transfer of substance or mixture into small containers (dedicated filling line, including weighing) - Use of blowing agents in manufacture of foam (PROC1, PROC2, PROC3, PROC8b, PROC9, PROC12)
<b>Product (article) characteristics</b>	
<b>Physical form of product:</b> Liquid	
<b>Vapour pressure:</b> > 10 kPa	
<b>Concentration of substance in product:</b> Covers percentage substance in the product up to 100 %.	
<b>Amount used, frequency and duration of use/exposure</b>	
<b>Duration:</b> Covers daily exposures up to 8 hours	
<b>Technical and organisational conditions and measures</b>	
<b>Technical and organisational measures</b> Keep drains in watertight containers while awaiting dismantling or subsequent recycling Use in contained systems Ensure operatives are trained to minimise exposures. Ensure that direct skin contact is avoided. Clear transfer lines prior to de-coupling. Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Drain down and flush system prior to equipment break-in or maintenance.	
<b>Conditions and measures related to personal protection, hygiene and health evaluation</b>	

**Personal protection**

Wear suitable respiratory protection.

***Other conditions affecting worker exposure***

**Temperature:** Assumes use at not more than 20 °C above ambient temperature.

**1.3 Exposure estimation and reference to its source**

N/A

**1.4 Guidance to DU to evaluate whether he works inside the boundaries set by the ES****Guidance to check compliance with the exposure scenario:**

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.