

Safety Data Sheet dated 19/9/2022, version 1

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

- 1.1. Product identifier
Mixture identification:
Trade name: COATING SPRAY AF EU FDA F2 400mL
Trade code: COATING
- 1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended use:
Spray a base di oli per il distacco di alimenti da teglie e stampi.
PROFESSIONAL USE.
Uses advised against:
Do not use for purposes other than those listed.
- 1.3. Details of the distributor of the safety data sheet
Martellato srl
Via Rovigo, 1/B – 35010
Vigonza (PD) – Italy
tel.: +39 049 7800155
fax.: +39 049 8087744
Competent person responsible for the safety data sheet:
martellato@martellato.com
- 1.4. Emergency telephone number
Company tel. Number: +39 049 7800155 (8.30-12.30; 14-18)

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture
The mixtures is a food stuff in the finished state, intended for the final user and therefore exempted from the Reg. (EC) 1272/2008 (CLP) according to Art. 1(5)(e). This CLP classification refers only to the physical hazards.
- EC regulation criteria 1272/2008 (CLP)
Aerosols 1, H222, H229 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:
P102 Keep out of reach of children.
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.
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
- 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
Not applicable

3.2. Mixtures

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

Qty	Name	Ident. Number	Classification
10.5 - 42.5 %	butane	Index number: 601-004-00-0 CAS: 106-97-8 EC: 203-448-7 REACH No.: 01-2119474691-32	 2.2/1A Flam. Gas 1A H220  2.5 Press. Gas H280
3 - 27.5 %	isobutane	Index number: 601-004-00-0 CAS: 75-28-5 EC: 200-857-2 REACH No.: 01-2119485395-27	 2.2/1A Flam. Gas 1A H220  2.5 Press. Gas H280
1 - 7.5 %	propane	Index number: 601-003-00-5 CAS: 74-98-6 EC: 200-827-9 REACH No.: 01-2119486944-21	 2.2/1A Flam. Gas 1A H220  2.5 Press. Gas H280
≤ 0.75 %	ethane	Index number: 601-002-00-X CAS: 74-84-0 EC: 200-814-8 REACH No.: 01-2119486765-21	 2.2/1A Flam. Gas 1A H220  2.5 Press. Gas H280

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, if irritation occurs.

In case of Ingestion:

Food stuff. OBTAIN A MEDICAL EXAMINATION if you feel unwell.

In case of Inhalation:

Remove casualty to fresh air. OBTAIN A MEDICAL EXAMINATION if you feel unwell.

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

No data available for the mixture. See section 11 for symptoms and effects of the substances.

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

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water spray jets, CO2, dry chemical, foam.

Extinguishing media which must not be used for safety reasons:

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

Use suitable breathing apparatus .

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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
- Wash with plenty of water.
- 6.4. Reference to other sections
- See also section 8 and 13

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
- Do not expose to temperatures exceeding 50 °C.
- Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.
- Keep away from food, drink and feed.
- Incompatible materials:
- See subsection 10.5
- Instructions as regards storage premises:
- Cool and adequately ventilated.
- 7.3. Specific end use(s)
- See section 1.2.

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters
- butane - CAS: 106-97-8
- OEL Type: NIOSH REL - TWA(10h): 1900 mg/m³, 800 ppm - Notes: United States, 10/2016
 - OEL Type: OSHA PEL - TWA(8h): 1900 mg/m³, 800 ppm - Notes: United States, 3/1989
 - OEL Type: MAK - TWA: 1600 mg/m³, 800 ppm - STEL: 3800 mg/m³, 1600 ppm - Notes: Austria
 - OEL Type: VLEP - STEL(15 min): 2370 mg/m³, 980 ppm - Notes: Belgium
 - OEL Type: TLV - TWA: 1200 mg/m³, 500 ppm - STEL: 2400 mg/m³, 1000 ppm - Notes: Denmark
 - OEL Type: HTP - TWA: 1900 mg/m³, 800 ppm - STEL(15 min): 2400 mg/m³, 100 ppm - Notes: Finland
 - OEL Type: VLE - TWA: 1900 mg/m³, 800 ppm - Notes: France
 - OEL Type: AGS - TWA: 2400 mg/m³, 1000 ppm - STEL(15 min): 9600 mg/m³, 4000 ppm - Notes: Germany
 - OEL Type: VLA - TWA: 1935 mg/m³, 800 ppm - Notes: Spain
 - OEL Type: WEL - TWA: 1450 mg/m³, 600 ppm - STEL: 1810 mg/m³, 750 ppm - Notes: United Kingdom
 - OEL Type: ACGIH - STEL: 1000 ppm
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: Australia
 - OEL Type: TLV - STEL(15 min): 1000 ppm - Notes: Canada - Ontario
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: Canada - Québec
 - OEL Type: TLV - STEL(15 min): 1000 ppm - Notes: Ireland
 - OEL Type: TLV - TWA: 2350 mg/m³ - STEL: 9400 mg/m³ - Notes: Hungary
 - OEL Type: JSOH - TWA: 1200 mg/m³, 500 ppm - Notes: Japan
 - OEL Type: DFG - TWA: 2400 mg/m³, 1000 ppm - STEL(15 min): 9600 mg/m³, 4000 ppm - Notes: Germany
 - OEL Type: TLV - TWA: 300 mg/m³ - Notes: Lithuania
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: New Zealand
 - OEL Type: TLV - TWA: 1900 mg/m³ - STEL: 3000 mg/m³ - Notes: Poland
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: Singapore
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: South Korea
 - OEL Type: TLV - TWA: 1900 mg/m³, 800 ppm - Notes: Switzerland
- isobutane - CAS: 75-28-5
- OEL Type: VLEP - TWA: 1000 ppm - STEL(15 min): 2370 mg/m³, 980 ppm - Notes: BELGIUM
 - OEL Type: AGW - TWA(8h): 2400 mg/m³, 1000 ppm - STEL(15 min): 9600 mg/m³, 4000 ppm - Notes: GERMANY
 - OEL Type: MAK - TWA(8h): 1900 mg/m³, 800 ppm - Notes: SWITZERLAND
 - OEL Type: ACGIH - STEL: 1000 ppm

- OEL Type: HTP - TWA(8h): 1900 mg/m3, 800 ppm - STEL(15 min): 2400 mg/m3, 1000 ppm - Notes: FINLAND

- OEL Type: TLV - STEL(15 min): 1000 ppm - Notes: IRELAND

propane - CAS: 74-98-6

- OEL Type: MAK - TWA: 1800 mg/m3, 1000 ppm - STEL: 3600 mg/m3, 2000 ppm - Notes: AUSTRIA

- OEL Type: VLEP - TWA: 1000 ppm - Notes: BELGIUM

- OEL Type: VEA - TWA: 1800 mg/m3, 1000 ppm - Notes: CANADA - QUEBEC

- OEL Type: TLV - TWA: 1800 mg/m3, 1000 ppm - STEL: 3600 mg/m3, 2000 ppm - Notes: DENMARK

- OEL Type: AGW - TWA: 1800 mg/m3, 1000 ppm - STEL: 7200 mg/m3, 4000 ppm - Notes: GERMANY

- OEL Type: NDS - TWA: 1800 mg/m3 - Notes: POLAND

- OEL Type: VLA - TWA: 1000 ppm - Notes: SPAIN

- OEL Type: TLV-ACGIH - TWA: 1800 mg/m3, 1000 ppm - Notes: USA

- OEL Type: OSHA - TWA: 1800 mg/m3, 1000 ppm - Notes: USA

- OEL Type: HTP - TWA: 1500 mg/m3, 800 ppm - STEL: 2000 mg/m3, 1100 ppm - Notes: FINLAND

- OEL Type: MAK - TWA: 1800 mg/m3, 1000 ppm - STEL: 7200 mg/m3, 4000 ppm - Notes: SWITZERLAND

- OEL Type: VLEP - TWA: 1400 mg/m3, 778 ppm - STEL: 1800 mg/m3, 1000 ppm - Notes: ROMANIA

- OEL Type: TLV - TWA: 1800 mg/m3, 1000 ppm - Notes: LITHUANIA

ethane - CAS: 74-84-0

- OEL Type: OEL - TWA: 1000 ppm - Notes: FINLAND

- OEL Type: WES - Notes: New Zealand_Simple asphyxiant - may present an explosion hazard

DNEL Exposure Limit Values

Not applicable

PNEC Exposure Limit Values

Not applicable

8.2. Exposure controls

Eye protection:

In case of involuntary spread, wear safety goggles with side shields (EN 166).

Protection for skin:

Under normal conditions of use no special precautions are required.

Protection for hands:

If a prolonged contact with the product is expected, it's recommended to protect your hands with work gloves resistant to penetration (ref. Standard EN 374). Final choice of the gloves material must also evaluate the process of using the product and any other products derived from them. It also recalled that the latex gloves could cause sensitization effects.

Respiratory protection:

If you exceed the workplace exposure limits or cause fogging, the use of a respiratory protection device is necessary.

Thermal Hazards:

None

Environmental exposure controls:

See section 7 and 13.

Appropriate engineering controls:

Ensure adequate ventilation of the premises.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Method:	Notes
Physical state:	Liquid under pressure	--	--
Colour:	oily	--	--
Odour:	Not applicable	--	--
Melting point/freezing point:	Not Relevant	--	--
Boiling point or initial boiling point and boiling range:	Not Relevant	--	--
Flammability:	Flammable	--	--
Lower and upper explosion limit:	LPG: 1.9 vol% - 8.5 vol%	--	--
Flash point:	LPG: -85 ° C	--	--
Auto-ignition temperature:	LPG: 465°C	--	--
Decomposition temperature:	Not Relevant	--	--
pH:	7	--	--
Kinematic viscosity:	Not Relevant	--	--
Solubility in water:	Not soluble	--	--

Solubility in oil:	Not Relevant	--	--
Partition coefficient n-octanol/water (log value):	Not Relevant	--	--
Vapour pressure:	LPG: 2,1±0,5 bar (20°C)	--	--
Density and/or relative density:	1.00 g/ml	--	--
Relative vapour density:	Not Relevant	--	--
Particle characteristics:			
Particle size:	Not applicable	--	--

9.2. Other information

Properties	Value	Method:	Notes
Explosive properties:	not explosive	--	--
Oxidizing properties:	non-oxidizing	--	--

SECTION 10: Stability and reactivity

10.1. Reactivity

In normal condition of use and storage (see section 7) dangerous reactions are not expected.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

LPG: contact with strong oxidants (peroxides, chromates, chlorates, perchlorates ...) or other substances (nitrates, liquid oxygen, fluorine ...) can form explosive mixtures with air and can cause fire hazards in particular conditions (sources of ignition). The presence of strong acids or alkalis can cause corrosion of the containers with consequent leakage of the product.

10.4. Conditions to avoid

Avoid overheating, electrostatic discharge and all sources of ignition.

10.5. Incompatible materials

LPG: mixture with nitrates or other strong oxidants (eg chlorates, perchlorates, hydrogen chloride, fluorine, liquid oxygen) can create an explosive mass. Strong acids and alkalis.

10.6. Hazardous decomposition products

In case of fire or decomposition may spread gas and vapors potentially harmful for health as CO₂, carbon mono-oxide and other irritating fumes.

SECTION 11: Toxicological information

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

Toxicological information of the product:

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

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:

butane - CAS: 106-97-8

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 658 mg/l - Duration: 4h - Notes: Vapors can cause narcotic effects.

Test: LC50 - Route: Inhalation Gas - Species: Rat = 274200 ppm - Duration: 4h - Notes: High concentration or excessive exposure can cause unconsciousness and asphyxiation. It causes headaches and drowsiness.

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Man Negative - Notes: Violent expansion of the compressed gas can cause cold burns at the point of contact. Symptoms are redness, burning / itching, blisters, and possible subsequent infections.

c) serious eye damage/irritation:

Test: Eye Irritant - Route: .EYES Negative - Notes: Violent expansion of the compressed gas can cause cold burns and permanent damage and / or blindness.

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Not applicable.

e) germ cell mutagenicity:

Test: Mutagenesis (Ames test) - Species: Salmonella Typhimurium Negative

Test: In vitro chromosome aberration test Negative

Test: In vivo mutation test Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: NOAEL - Route: Inhalation Gas - Species: Rat = 21394 mg/l

h) STOT-single exposure:

Test: Acute toxicity Not available

i) STOT-repeated exposure:

Test: NOAEL - Route: Inhalation Gas - Species: Rat = 21394 mg/l

Test: Chronic toxicity - Route: Inhalation Gas - Species: Rat Negative - Duration: 6 weeks

isobutane - CAS: 75-28-5

a) acute toxicity:

Test: LC50 - Route: Inhalation Gas - Species: Rat = 658 mg/l - Duration: 4h

Test: LC50 - Route: Inhalation Gas - Species: Mouse = 260000 mg/l - Duration: 4h - Notes: Vapors can cause narcotic effects. High concentrations in the inhaled air can cause unconsciousness and asphyxiation due to lack of oxygen.

b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Man Negative - Notes: Violent expansion of the compressed gas can cause cold burns at the point of contact. Symptoms are redness, burning / itching, blisters, and possible subsequent infections.

c) serious eye damage/irritation:

Test: Eye Irritant - Route: .EYES Negative - Notes: Violent expansion of the compressed gas can cause cold burns and permanent damage and / or blindness.

d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin Negative

e) germ cell mutagenicity:

Test: Mutagenesis (Ames test) - Species: Salmonella Typhimurium Negative

Test: Mutagenesis (Micronucleus Test) - Route: Inhalation Gas - Species: Rat Negative

f) carcinogenicity:

Test: Carcinogenicity Negative

g) reproductive toxicity:

Test: NOAEL (fertility) - Route: Inhalation Gas - Species: Rat = 7131 mg/l - Notes: parents

Test: NOAEL - Route: Inhalation Gas - Species: Rat = 21394 mg/l

i) STOT-repeated exposure:

Test: NOAEL - Route: Inhalation Gas - Species: Rat = 21394 mg/l - Duration: 6 weeks

propane - CAS: 74-98-6

a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 800000 ppm - Duration: 15 minutes - Source: studio chieve
propano - Notes: Vapors can cause narcotic effects, headaches and dizziness and asphyxiation due to lack of oxygen.

- Test: LC50 - Route: Inhalation Gas - Species: Rat = 14442738 mg/m3 - Duration: 15 minutes - Source: studio chiave propano
- Test: LC50 - Route: Inhalation Gas - Species: Rat = 1443 mg/l - Duration: 15 minutes - Source: studio chiave propano
- b) skin corrosion/irritation:
Test: Skin Irritant - Route: Skin - Species: Man Negative - Notes: Compressed gas causes cold burns.
- c) serious eye damage/irritation:
Test: Eye Irritant - Route: .EYES Negative - Notes: Compressed gas causes cold burns.
- d) respiratory or skin sensitisation:
Test: Respiratory Sensitization - Route: Inhalation Gas - Notes: Asphyxiating, it causes headaches and drowsiness.
- e) germ cell mutagenicity:
Test: Mutagenesis (Ames test) - Species: Salmonella Typhimurium Negative - Source: studio chiave propano
- f) carcinogenicity:
Test: Carcinogenicity Negative
- i) STOT-repeated exposure:
Test: LOAEC - Route: Inhalation Gas - Species: Rat = 21641 mg/m3
Test: NOAEL - Route: Inhalation Gas - Species: Rat = 7214 mg/l - Duration: 4h - Source: studio chiave propano - Notes: OECD 422
- ethane - CAS: 74-84-0
- a) acute toxicity:
Test: LC50 - Route: Inhalation Gas - Species: Rat > 800000 ppm - Duration: 15 minutes
Test: LC50 - Route: Inhalation Gas - Species: Rat = 1442738 mg/m3 - Duration: 15 minutes
Test: LC50 - Route: Inhalation Gas - Species: Rat = 1443 mg/l - Duration: 15 minutes
- e) germ cell mutagenicity:
Test: Bacterial Reverse Mutation Test Negative
Test: Mutagenensis (Micronucleus Test) Negative
- g) reproductive toxicity:
Test: NOAEC - Route: Inhalation Gas - Species: Rat = 10000 ppm - Duration: 90 days
Test: NOAEC - Route: Inhalation Gas - Species: Rat = 10426 ppm
- i) STOT-repeated exposure:
Test: NOAEC - Route: Inhalation Gas - Species: Rat = 10000 ppm - Duration: 90 days

11.2. Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Not classified for environmental hazards

Based on available data, the classification criteria are not met

butane - CAS: 106-97-8

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 24.11 mg/l - Duration h: 96 - Notes: QSAR EPA 2008

Endpoint: LC50 - Species: Daphnia = 14.22 mg/l - Duration h: 48

isobutane - CAS: 75-28-5

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 24.11 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 14.22 mg/l - Duration h: 48

Endpoint: ErC50 - Species: Algae = 7.71 mg/l

propane - CAS: 74-98-6

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 49.47 mg/l - Duration h: 96

Endpoint: EC50 - Species: Daphnia = 27.14 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 11.89 mg/l - Duration h: 72

ethane - CAS: 74-84-0

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 49.9 mg/l - Duration h: 96

Endpoint: LC50 - Species: Daphnia = 69.43 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 19.37 mg/l - Duration h: 96

12.2. Persistence and degradability

butane - CAS: 106-97-8

Biodegradability: Readily biodegradable

isobutane - CAS: 75-28-5



- Biodegradability: Readily biodegradable
propane - CAS: 74-98-6
Biodegradability: Readily biodegradable
ethane - CAS: 74-84-0
Biodegradability: Readily biodegradable - Duration h: 385,5 h - %: 100
- 12.3. Bioaccumulative potential
butane - CAS: 106-97-8
Not bioaccumulative - Test: Log Pow 2.89
isobutane - CAS: 75-28-5
Not bioaccumulative - Test: Log Pow 2.88
propane - CAS: 74-98-6
Not bioaccumulative - Test: Log Pow 2.35
ethane - CAS: 74-84-0
Test: Log Pow 1.81
- 12.4. Mobility in soil
butane - CAS: 106-97-8
Notes: Thanks to its rapid evaporation, soil and water pollution are not likely.
isobutane - CAS: 75-28-5
Notes: Thanks to its rapid evaporation, soil and water pollution are not likely.
propane - CAS: 74-98-6
Absorption to the solid phase of the soil is not expected.
- 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.

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
IATA-Technical name: FLAMMABLE AEROSOL
IMDG-Shipping Name: AEROSOLS, flammable
IMDG-Technical name: FLAMMABLE AEROSOL
- 14.3. Transport hazard class(es)
ADR-Class: 2
ADR-Label: 2.1
ADR - Hazard identification number: -
IATA-Class: 2
IATA-Label: 2.1
IMDG-Class: 2
IMDG-Class: 2.1
- 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)
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	
Not applicable	

SECTION 15: Regulatory information

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

This document has been prepared in accordance with the laws listed below only for physical hazards, according to the exemption of food stuff from the Reg. (EC) n. 1272/2008 (CLP) Art. 1(5)(e) and Reg. (EC) n. 1907/2006 (REACH) Art. 2(6). Food are within the scope of food laws.

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)

Where applicable, refer to the following regulatory provisions :

Directive 2012/18/EU (Seveso III)
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

15.2. Chemical safety assessment

Not applicable (food stuff).

SECTION 16: Other information

Full text of phrases referred to in Section 3:

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

Hazard class and hazard category	Code	Description
Flam. Gas 1A	2.2/1A	Flammable gas, Category 1A
Aerosols 1	2.3/1	Aerosol, Category 1
Press. Gas	2.5	Gases under pressure

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	Aerosols CLP criteria (Annex I, 2.3.2.2.)

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECHA website: <https://echa.europa.eu/home>

IFA GESTIS website: <https://limitvalue.ifa.dguv.de>

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.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWA:	Time-weighted average
WGK:	German Water Hazard Class.