

SAFETY DATA SHEET*in accordance with Regulation REACH regulation (EC) n° 1907/2006 - n° 2020/878**Revision date: 26.10.2023***1- IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/
UNDERTAKING****Product details****Trade name:** Aerosol gold effect**Article number:** 26726**Relevant identified uses of the substance or mixture and uses advised against:**

Gold chrome effect enamel for “do it yourself” and professional use

Sector of Use:

SU 21 Consumer uses: Families = general population = consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Product category: PC9a Coatings and paints, thinners, paint removers**Process category:** PROC11 Non industrial spraying**Environmental release category:**

ERC8a Wide dispersive indoor use of processing aids in open systems

ERC8d External widespread use of manufacturing aids in open systems.

Intended use: Car refinishing Product/ Paint**Manufacturer/Supplier:**

Chamäleon GmbH

Rudolf-Diesel-Straße, 8a, 69115 Heidelberg

Germany

Further information obtainable from: Product Safety Department**Information in case of emergency:** + 49 70024112112 (CH)**2 – HAZARDS IDENTIFICATION****Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS07



GHS09

EUH066 Repeated exposure may cause skin dryness or cracking.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 Specific target organ toxicity (single exposure)

Aquatic Chronic 2 H411 Hazardous to the aquatic environment.

The propellant gas is not taken into account when determining the health and environmental classification of the mixture.

Label elements

Mixture for aerosol application.

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS02



GHS07



GHS09

Signal word Danger

Contain:

acetone

n-butyl acetate

Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

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.
- P260 Do not breathe vapours.
- P271 Use only outdoors or in a well-ventilated area.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P312 Call a POISON CENTER/doctor/... if you feel unwell.
- P337 + P313 If eye irritation persists: Get medical advice/attention.
- P391 Collect spillage.
- P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations

Other hazards:

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

The mixture does not contain substances > = 0.1% with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

Results of PBT and vPvB assessment:

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

3- COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

Composition:		
CAS: 68476-40-4 EC: 270-681-9 REACH: 01-2119486557-22	hydrocarbons, c3-c4 (propane, butane, isobutane)	>30-<40%
	GHS02 Flam. Gas 1A, H220 Press. Gas, H280	
CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119475103-49	acetone	>10-<20%
	GHS07, GHS02, Dgr , Flam. Liq. 2, H225 Eye Irrit. 2, H319, STOT SE 3, H336, EUH:066	
CAS: 105-58-8 EINECS: 203-311-1	diethyl carbonate	>10-<20%
	GHS02 Wng, Flam. Liq. 3, H226	
CAS: 1330-20-7	Xilene (benzene <0.01%)	>5-<10%

EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-0000	GHS07, GHS08, GHS02, Dgr, Flam. Liq. 3, H226, Asp. Tox. 1, H304, Acute Tox. 4, H312, Skin Irrit. 2, H315, Eye Irrit. 2, H319, STOT SE 3, H335 STOT RE 2, H373, Aquatic Chronic 3, H412	
CAS: 7440-66-6 EC: 231-175-3 REACH: 01-2119467174-37	powdered zinc (stabilised) GHS09, Wng, Aquatic Acute 1, H400, M Acute = 1, Aquatic Chronic 1, H410, M Chronic = 1	>5 <10%
CAS: 7440-50-8 EC: 231-159-6 REACH: 01-2119480154-42	copper GHS07, GHS09, Wng Acute Tox. 4, H302, Aquatic Chronic 2, H411, Aquatic Acute 1, H400 M Acute = 1	>2,5-<5%
CAS: 123-86-4 EC: 204-658-1 REACH: 01-2119485493-29	n-butyl acetate GHS07, GHS02, Wng, Flam. Liq. 3, H226, STOT SE 3, H336	>1-<2,5%

Specific concentration limits:

CAS: 68476-40-4 EC: 270-681-9 REACH: 01-2119486557-22	hydrocarbons, c3-c4 (propane, butane, isobutane)	inhalation: ATE = 1443 mg/l (dust/mist)
CAS: 67-64-1 EC: 200-662-2 REACH: 01-2119475103-49	acetone	oral: ATE = 5800 mg/kg BW
CAS: 1330-20-7 EINECS: 215-535-7 Reg.nr.: 01-2119488216-32-0000	Xilene (benzene <0.01%)	inhalation: ATE = 20 mg/l (dust/mist) oral: ATE = 5267 mg/kg BW
CAS: 7440-50-8 EC: 231-159-6 REACH: 01-2119480154-42	copper	inhalation: ATE = 9 mg/l (gas) oral: ATE = 300 mg/kg BW
CAS: 123-86-4 EC: 204-658-1 REACH: 01-2119485493-29	n-butyl acetate	inhalation: ATE = 21 mg/l (dust/mist)

4- FIRST - AID MEASURE

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
 NEVER induce swallowing by an unconscious person.

■ **Description of first aid measures**

After inhalation:

In the event of massive inhalation, remove the person exposed to fresh air. Keep warm and at rest.

If the person is unconscious, place in recovery position. Notify a doctor in all events, to ascertain whether observation and supportive hospital care will be necessary.

If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.

After skin contact:

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner. Watch out for any remaining product between skin and clothing, watches, shoes, etc.

If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.

After eye contact:

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.

If there is any redness, pain or visual impairment, consult an ophthalmologist.

After swallowing:

In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Keep the person exposed at rest. Do not force vomiting. Seek medical attention, showing the label.

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

Most important symptoms and effects, both acute and delayed:

No data available.

5- FIRE - FIGHTING MEASURE

Flammable.

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

Extinguishing media

Keep packages near the fire cool, to prevent pressurised containers from bursting.

Suitable extinguishing agents: sprayed water or water mist, water with AFFF (Aqueous Film Forming Foam) additive, halon, foam, multipurpose ABC powder, BC powder, carbon dioxide (CO₂). Prevent the effluent of fire-fighting measures from entering drains or waterways.

Unsuitable extinguishing agents:

water jet

Special hazards arising from the substance or mixture:

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health. Do not breathe in smoke. In the event of a fire, the following may be formed: carbon monoxide (CO), carbon dioxide (CO₂).

Advice for firefighters:

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

6- ACCIDENTAL RELEASE MEASURE

Personal precautions, protective equipment and emergency procedures:
Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Because of the organic solvents contained in the mixture, eliminate sources of ignition and ventilate the area. Avoid inhaling the vapors. Avoid any contact with the skin and eyes.

If a large quantity has been spilt, evacuate all personnel and only allow intervention by trained operators equipped with safety apparatus.

For first aid worker

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

Environmental precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways. If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures. Use drums to dispose of collected waste in compliance with current regulations (see section 13).

Methods and material for containment and cleaning up: Clean preferably with a detergent, do not use solvents.

Reference to other sections

No data available.

7- HANDLING AND STORAGE

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

Precautions for safe handling: Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

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

Remove contaminated clothing and protective equipment before entering eating areas.

Fire prevention :

Handle in well-ventilated areas.

Vapours are heavier than air.

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

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

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

Do not pierce or burn, even after use.

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

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

Do not use tools which may produce sparks.

- Do not smoke.
- Prevent access by unauthorised personnel.
- Recommended equipment and procedures :**
- For personal protection, see section 8.
- Observe precautions stated on label and also industrial safety regulations.
- Do not breathe in aerosols.
- Avoid inhaling vapors.
- Carry out any industrial operation which may give rise to this in a sealed apparatus.
- Provide vapor extraction at the emission source and also general ventilation of the premises.
- Also provide breathing apparatus for certain short tasks of an exceptional nature and for emergency interventions.
- In all cases, recover emissions at source.
- Avoid skin and eye contact with this mixture.
- Packages which have been opened must be reclosed carefully and stored in an upright position.
- Prohibited equipment and procedures :**
- No smoking, eating or drinking in areas where the mixture is used.
- Never open the packages under pressure.
- Conditions for safe storage, including any incompatibilities:**
- No data available.
- Storage:**
- Keep out of reach of children.
- Keep the container tightly closed in a dry, well-ventilated place.
- Keep away from all sources of ignition - do not smoke.
- Keep well away from all sources of ignition, heat and direct sunlight.
- The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.
- Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C.
- Packaging**
- Always keep in packaging made of an identical material to the original.
- Specific end use(s):**
- No data available.

8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Occupational exposure limits :

European Union (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3 :	VME-ppm :	VLE-mg/m3 :	VLE-ppm :	Notes :
67-64-1	1210	500	-	-	-
1330-20-7	221	50	442	100	Peau

123-86-4	241	50	723	150	
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Germany - AGW (BAuA - TRGS 900, 02/2022) :

CAS	VME :	VME :	Excess	Notes
67-64-1		500 ppm 1200 mg/m ³		2(I)
1330-20-7		50 ppm 220 mg/m ³		2(II)
123-86-4		62 ppm 300 mg/m ³		2 (I)

Belgium (Royal decree of 11/05/2021) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	246 ppm 594 mg/m ³	492 ppm 1187 mg/m ³			
1330-20-7	50 ppm 221 mg/m ³	100 ppm 442 mg/m ³		D	
7440-50-8	1 mg/m ³	-	-	-	-
123-86-4	50 ppm 238 mg/m ³	150 ppm 712 mg/m ³			

Denmark (2020) :

Stof	TWA	VSTEL	Loftvaerdi	Anm
67-64-1	250 ppm 600 mg/m ³			E
1330-20-7	25 ppm 109 mg/m ³			EH
7440-50-8	-	1 mg/m ³	-	
123-86-4	150 ppm 710 mg/m ³			

France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm :	VME-mg/m ³ :	VLE-ppm :	VLE-mg/m ³ :	Notes :	TMP No :
67-64-1	500	1210	1000	2420	-	84
1330-20-7	50	221	100	442	*	4 Bis. 84. *
123-86-4	50	241	150	723	-	84

Spain (Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), 2019) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1.21 mg/m ³			VLB. VLI	
1330-20-7	50 ppm 221 mg/m ³	100 ppm 442 mg/m ³		via dermica. VLB.vu	
7440-50-8	0.2 mg/m ³	-	-	-	-
123-86-4	50 ppm	150 ppm		VLI	

	241 mg/m3	723 mg/m3			
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Italy (Decree, 26/02/2004) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1210 mg/m3				
1330-20-7	50 ppm 221 mg/m3	100 ppm 442 mg/m3		Pelle	

Luxembourg (RGD 14/11/2016, Memorial A n°247 du 8 mars 2017) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1210 mg/m3				
1330-20-7	50 ppm 221 mg/m3	100 ppm 442 mg/m3		Peau	

Netherlands / MAC-waarde (10 december 2014) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1.21 mg/m3	1 ppm 2.42 mg/m3			
1330-20-7	47.5 ppm 210 mg/m3	100 ppm 442 mg/m3		H	
7440-50-8	0.2 mg/m3	-	-	-	-
123-86-4	50 ppm 241 mg/m3	150 ppm 723 mg/m3			

Poland (Dz. U. z 2018 r. poz. 917, 1000 i 1076) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	600 mg/m3	1800 mg/m3			
1330-20-7	100 mg/m3	200 mg/m3		skóra	
7440-50-8	0.2 mg/m3				
123-86-4	240 mg/m3	720 mg/m3			

Portugal (1.a N° 26 - 06/01/2012) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1 210 mg/m3				
1330-20-7	50 ppm 221 mg/m3	100 ppm 442 mg/m3		Cutânea	

Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
67-64-1	500 ppm 1200 mg/m3	1000 ppm 2400 mg/m3		
1330-20-7	100 ppm	200 ppm		

	435 mg/m3	870 mg/m3		
7440-50-8	0.1 ppm	0.2 ppm		
123-86-4	50 ppm 240 mg/m3	150 ppm 720 mg/m3		

Sweden (AFS 2018 :1) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	250 ppm 600 mg/m3	500 ppm 1200 mg/m3		V	
1330-20-7	50 ppm 221 mg/m3	100 ppm 442 mg/m3		H	
7440-50-8	0.01 mg/m3				
123-86-4	50 ppm 241 mg/m3	150 ppm 723 mg/m3			

Romania (Hotarâre 1218/2006) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1210 mg/m3				
105-58-8	145 ppm 700 mg/m3	207 ppm 1000 mg/m3			
1330-20-7	50 ppm 221 mg/m3	100 ppm 442 mg/m3			
7440-50-8	0.5 mg/m3	1.5 mg/m3			
123-86-4	150 ppm 715 mg/m3	200 ppm 950 mg/m3			

UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
67-64-1	500 ppm 1210 mg/m3	1500 ppm 3620 mg/m3			
1330-20-7	50 ppm 220 mg/m3	100 ppm 441 mg/m3		Sk. BMGV	
7440-50-8	0.2 mg/m3	-	-	-	-
123-86-4	150 ppm 724 mg/m3	200 ppm 966 mg/m3			

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

N-Butyl Acetate (Cas: 123-86-4)

Final use: Workers.
Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 480 mg of substance/m3
Exposure method: Inhalation.
Potential health effects: Short term systemic effects.

- | | |
|---------------------------|------------------------------------|
| DNEL : | 960 mg of substance/m ³ |
| Final use: | Consumers. |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 102 mg of substance/m ³ |

Xilene (Benzene <0.01%) (Cas: 1330-20-7)

- | | |
|---------------------------|-------------------------------------|
| Final use: | Workers. |
| Exposure method: | Inhalation. |
| Potential health effects: | Short term local effects. |
| DNEL : | 289 mg of substance/m ³ |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 77 mg of substance/m ³ |
| Final use: | Consumers. |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 14.8 mg of substance/m ³ |

Diethyl Carbonate (Cas: 105-58-8)

- | | |
|---------------------------|------------------------------------|
| Final use: | Workers. |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0,027 mg/kg body weight/day |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term systemic effects. |
| DNEL : | 0,2 mg of substance/m ³ |

Acetone (Cas: 67-64-1)

- | | |
|---------------------------|-------------------------------------|
| Final use: | Workers. |
| Exposure method: | Inhalation. |
| Potential health effects: | Long term local effects. |
| DNEL : | 1210 mg of substance/m ³ |
| Exposure method: | Inhalation. |
| Potential health effects: | Short term local effects. |
| DNEL : | 2400 mg of substance/m ³ |
| Final use: | Consumers. |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term local effects. |
| DNEL : | 62 mg/kg body weight/day |
| Exposure method: | Dermal contact. |
| Potential health effects: | Long term local effects. |
| DNEL : | 186 mg/kg body weight/day |

- Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 200 mg of substance/m³

Predicted no effect concentration (PNEC):**Acetone (Cas: 67-64-1)**

Environmental compartment:	Soil.
PNEC :	33.3 mg/kg
Environmental compartment:	Fresh water.
PNEC :	10.6 mg/l
Environmental compartment:	Sea water.
PNEC :	1.06 mg/l
Environmental compartment:	Intermittent waste water.
PNEC :	21 mg/l
Environmental compartment:	Fresh water sediment.
PNEC :	30.4 mg/l
Environmental compartment:	Marine sediment.
PNEC :	3.04 mg/l
Environmental compartment:	Waste water treatment plant.
PNEC :	100 mg/l

Exposure controls:**Personal protection measures, such as personal protective equipment**

Use personal protective equipment that is clean and has been properly maintained.
Store personal protective equipment in a clean place, away from the work area.
Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using.
Ensure that there is adequate ventilation, especially in confined areas.

Eye / face protection

Avoid contact with eyes.
Use eye protectors designed to protect against liquid splashes
Before handling, wear safety goggles with protective sides accordance with standard EN166.
In the event of high danger, protect the face with a face shield.
Prescription glasses are not considered as protection.
Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.
Provide eyewash stations in facilities where the product is handled constantly.

Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.
Gloves must be selected according to the application and duration of use at the workstation.
Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

- Type of gloves recommended :
PVA (Polyvinyl alcohol)

Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing : In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Work clothing worn by personnel shall be laundered regularly.

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

Respiratory protection

Avoid inhaling vapors.

If the ventilation is insufficient, wear appropriate breathing apparatus.

When workers are confronted with concentrations that are above occupational exposure limits, they must wear a suitable, approved, respiratory protection device.

Type of FFP mask : Wear a disposable half-mask aerosol filter in accordance with standard EN149/A1.

Category : FFP1

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 : A1 (Brown)

Particle filter according to standard EN143 : P1 (White)

9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	
Physical state :	Fluid liquid. Spray.
Pressure container with product and liquefied gas	
Colour	
In accordance with the product designation	
Odour	
Odour threshold :	Not stated.
Solvent	
Melting point	
Melting point/melting range :	Not specified.
Freezing point	
Freezing point / Freezing range :	Not stated.
Boiling point or initial boiling point and boiling range	
Boiling point/boiling range :	< 0 °C

Flammability

Flammability (solid, gas) : Estremamente infiammabile

Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) 1,9 Vol % (LEL):

Explosive properties, upper explosivity limit (%) 15,0 Vol % (UEL):

Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not specified.

Decomposition temperature

Decomposition point/decomposition range : Not specified.

pH

pH : Not stated.

Neutral.

pH (aqueous solution) : Not stated. Not applicable due to the nature of the product.

Kinematic viscosity

Viscosity : Not stated.

Solubility

Water solubility : Insoluble.

Fat solubility : Not stated.

Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Above 300 kPa (3 bar). 4,0 +/- 0,2 Bar a 20C

Density and/or relative density

Density : 0,74 +/- 0,01 g/cm³ a 20 °C

Relative vapour density

Vapour density : Not stated.

Particle characteristics

The mixture does not contain nanoforms.

Other information

% VOC : 530 g/l

Information with regard to physical hazard classes

No data available.

Aerosols

Chemical combustion heat : Not specified.

Inflammation time : Not specified.

Deflagration density : Not specified.

Inflammation distance : Not specified.

Flame height : Not specified.

Flame duration : Not specified.

Other safety characteristics

No data available.

10- STABILITY AND REACTIVITY

Reactivity

No dangerous reaction if properly used and stored.

Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

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

Avoid :

- heating
- heat

Incompatible materials

Keep away from oxidant, strong acid and strong alkali, in order to avoid corrosion of steel containers.

Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)
- carbon dioxide (CO₂)

11- TOXICOLOGICAL INFORMATION

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

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

May have reversible effects on the eyes, such as eye irritation which is totally reversible by the end of observation at 21 days. Splashes in the eyes may cause irritation and reversible damage. Narcotic effects may occur, such as drowsiness, narcosis, decreased alertness, loss of reflexes, lack of coordination or dizziness. Effects may also occur in the form of violent headaches or nausea, judgement disorder, giddiness, irritability, fatigue or memory disturbance.

Substances

Acute toxicity :

hydrocarbons, c3-c4 (propane, butane, isobutane) (cas: 68476-40-4)		
Inhalative	LC50	1443 mg/m ³ (rats)

n-butyl acetate (cas: 123-86-4)		
Oral	LD50	> 6400 mg/kg bodyweight/day(rats)
Dermal	LD50	> 5000 mg/kg bodyweight/day (rabbits)
Inhalative	LC50	21 mg/l (rats)
copper (cas: 7440-50-8)		
Oral	LD50	300 mg/kg bodyweight/day(rats)
Dermal	LD50	> 2000 mg/kg bodyweight/day(rats)
Inhalative	LC50	9 mg/l (rats)
powdered zinc (stabilised) (cas: 7440-66-6)		
Oral	LD50	>= 2000 mg/kg bodyweight/day(rats)
Inhalative	LC50	>= 5.4 mg/l (rats)
xilene (benzene <0.01%) (cas: 1330-20-7)		
Oral	LD50	5267 mg/kg bodyweight/day (rats)
Dermal	LD50	> 5000 mg/kg bodyweight/day (rabbits)
Inhalative	LC50	20 mg/l (rats)
diethyl carbonate (cas: 105-58-8)		
Oral	LD50	> 15000 mg/kg bodyweight/day (rats)
Inhalative	LC50	> 1268 mg/m3 (rats)
acetone (cas: 67-64-1)		
Oral	LD50	5800 mg/kg bodyweight/day (rats)
Dermal	LD50	> 20000 mg/kg bodyweight/day (rabbits)
Inhalative	LC50	50

Mixture

No toxicological data available for the mixture.

Information on other hazards

No data available

12 – ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

Toxicity

Substances
copper (cas: 7440-50-8)

Crustacean toxicity :	EC50 > 2000 mg/l Species : Others Duration of exposure : 48 h
n-butyl acetate (cas: 123-86-4)	
Fish toxicity :	LC50 = 18 mg/l Species : Pimephales promelas Duration of exposure : 96 h
Crustacean toxicity :	EC50 44 mg/l Species : Daphnia magna Duration of exposure : 48 h
Algae toxicity :	Species : Pseudokirchnerella subcapitata
xilene (benzene <0.01%) (cas: 1330-20-7)	
Fish toxicity :	LC50 = 2.6 mg/l Species : Oncorhynchus mykiss
Crustacean toxicity :	EC50 = 1 mg/l Species : Daphnia magna Duration of exposure : 24 h
Algae toxicity :	ECr50 = 4.36 mg/l Species : Pseudokirchnerella subcapitata Duration of exposure : 72 h
diethyl carbonate (cas: 105-58-8)	
Fish toxicity :	LC50 > 100 mg/l Species : Danio rerio Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 100 mg/l Duration of exposure : 48 h
Algae toxicity :	ECr50 > 100 mg/l Species : Desmodesmus subspicatus Duration of exposure : 72 h
acetone (cas: 67-64-1)	
Fish toxicity :	LC50 = 302 mg/l Species : Others Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 4042 mg/l Species : Daphnia pulex Duration of exposure : 48 h
Algae toxicity :	ECr50 = 1680 mg/l Species : Others Duration of exposure : 48 h

hydrocarbons, c3-c4 (propane, butane, isobutane) (cas: 68476-40-4)	
Fish toxicity :	LC50 = 24.11 mg/l Duration of exposure : 96 h
Crustacean toxicity :	EC50 = 14.22 mg/l Duration of exposure : 48 h

Mixtures

No aquatic toxicity data available for the mixture.

Persistence and degradability

Substances

n-butyl acetate (cas: 123-86-4)	
Biodegradability:	no degradability data is available, the substance is considered as not degrading quickly.
copper (cas: 7440-50-8)	
Biodegradability :	Rapidly degradable.
powdered zinc (stabilised) (cas: 7440-66-6)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
xilene (benzene <0.01%) (cas: 1330-20-7)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
diethyl carbonate (cas: 105-58-8)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
acetone (cas: 67-64-1)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.
hydrocarbons, c3-c4 (propane, butane, isobutane) (cas: 68476-40-4)	
Biodegradability :	no degradability data is available, the substance is considered as not degrading quickly.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) 1907/2006 concerning the Registration, Evaluation,

- Restriction of chemicals substances (see section 3 and 2): does not meet the criteria for classification as PBT and vPvB therefore – not applicable. Use according to good working practices, avoiding to disperse the product into the environment.

Endocrine disrupting properties

The solvents and propellant contained do not have an endocrine disrupting property

Other adverse effects

The solvents and propellant contained have a low level of photochemical ozone creation potential.

13– DISPOSAL CONSIDERATION

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

Waste treatment methods

Do not pour into drains or waterways.

Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

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

Give to a certified disposal contractor.

Packaging waste code:

Cartons code: CER 15.01.01

Caps plastic packaging code: CER 15.01.02

EWC waste code referring to emptied spray cans: 15 01 10*

Rejection hazard characteristics:

HP3 = Flammable.

HP4 = Irritant

14– TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2023 - IMDG 2022 [41-22] - ICAO/IATA 2023 [64]).

UN-Number or ID number

ADR, IMDG, IATA UN1950

UN proper shipping name

ADR UN1950 AEROSOLS, flammable

IMDG UN1950 AEROSOLS, flammable
IATA UN1950 AEROSOLS, flammable

**Transport hazard class(es)
ADR, IMDG, IATA**



Class 2.1
Label 2.1

Packing group
ADR, IMDG, IATA not required

**Environmental hazards:
Environmentally hazardous material
Special precautions for user
ADR/RID**

Class 2
Code 5F
Pack gr.-
Label 2.1
Ident. LQ - 1 L
Provis. 190 327 344 625
EQ E0
Cat. 2
Tunnel D
IMDG
Class 2
Label See SP63
Pack gr. -
LQ See SP277
EMS F-D. S-U
Provis. 63 190 277 E0
327 344 381
959
EQ E0
Stowage Handling SW1 SW22
Segregation SG69

IATA

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

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.
Marine pollutant (IMDG 3.1.2.9):(copper)

Maritime transport in bulk according to IMO instruments
No data available.

15 – REGULATORY INFORMATION

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

Classification and labelling information included in section 2:

The following regulations have been used:

EU Regulation No. 1272/2008 amended by EU Regulation No. 2022/692 (ATP 18)

Container information:

No data available.

Restrictions applied under Title VIII of Regulation (EC) No. 1907/2006 (REACH):

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):

■ <https://echa.europa.eu/substances-restricted-under-reach>.

Explosives precursors :

The mixture contains at least one substance subject to Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Acetone (CAS 67-64-1)

The acquisition, introduction, possession or use of this restricted explosive precursor by members of the general public is subject to the reporting obligations.

Particular provisions :

No data available.

Chemical safety assessment

The exposure scenarios of the substances leading to the classification of the mixture are available. A chemical safety assessment has not been carried out.

16-OTHER INFORMATION

Relevant phrases

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure .

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms:

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.

LC50 : The concentration of a test substance resulting in 50% lethality in a given period.

EC50 : The effective concentration of substance that causes 50% of the maximum response.

ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.

NOEC : The concentration with no observed effect.

REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.

ATE : Acute Toxicity Estimate

BW : Body Weight

- DNEL : Derived No-Effect Level
- PNEC : Predicted No-Effect Concentration
- STEL : Short-term exposure limit
- TWA : Time Weighted Averages
- TMP : French Occupational Illness table
- TLV : Threshold Limit Value (exposure)
- AEV : Average Exposure Value.
- ADR : European agreement concerning the international carriage of dangerous goods by Road.
- IMDG : International Maritime Dangerous Goods.
- IATA : International Air Transport Association.
- ICAO : International Civil Aviation Organisation
- RID : Regulations concerning the International carriage of Dangerous goods by rail.
- GHS02 : Flame
- GHS07 : Exclamation mark
- GHS09 : Environment
- PBT: Persistent, bioaccumulable and toxic.
- vPvB : Very persistent, very bioaccumulable.
- SVHC : Substances of very high concern.
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
- IATA: International Air Transport Association
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU) (=COV)
- NOEC: No Observed Effect Concentration (REACH)
- PEL: Permissible Exposure Limit
- TLV: Theshold Limit Value
- CLP: Classification, Labelling and Packaging
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL/C: Short-Term Exposure Limit/Ceiling
- LEL: Lower Explosive Limit
- UEL: Upper Explosive Limit
- BW: Body weight
- NOAEL: No Observed Adverse Effects Level
- RoHS: Restriction on the use of Hazardous Substances.
- RTECS : Registry of Toxic Effects of Chemical Substances.
- NOAEC : No Observed Adverse Effects Concentration
- CER : Catalogo Europeo Rifiuti.

The information contained in these sheets is based on the present state of knowledge and current national legislation. It provides guidance on health, safety and environmental aspects and should not be construed as any guarantee of technical performance or suitability for particular applications.