

This SDS is an English translation of Regulation (EU) no 2015/830, without any country-specific legislation

Flame Aerosol Paint - Feuerstein GmbH. Willy-Brandt-Str. 9/2 77933 Lahr. Tel: +49 (0) 7821 - 92 229 - 0 Flame BOOSTER

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

1.1 Product identifier: Flame Aerosol Paint - Feuerstein GmbH.

Willy-Brandt-Str. 9/2 77933 Lahr. Tel: +49 (0) 7821 - 92 229 - 0

Flame BOOSTER

Other means of identification:

Non-applicable

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

Relevant uses: Paints and varnishes

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Cosmos Lac AE

Πίνδου 1, Καλλιθέα 17672, Αθήνα.

- 1 Pindou str, Kallithea 17672, Athens. - Greece Phone: +30 2109570222 - Fax: +30 2109566671

factory@cosmoslac.com http://www.cosmoslac.com

1.4 Emergency telephone number: +30 2109570222 08:00 - 16:00 EET

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.

Aerosol 1: Pressurised container: May burst if heated., H229

Aerosol 1: Flammable aerosols, Category 1, H222

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412

Asp. Tox. 1: Aspiration hazard, Category 1, H304

Eye Irrit. 2: Eye irritation, Category 2, H319

Skin Irrit. 2: Skin irritation, Category 2, H315

STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2 (Oral), H373

STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335

STOT SE 3: Specific toxicity causing drowsiness and dizziness, single exposure, Category 3, H336

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Danger







Hazard statements:

Aerosol 1: H229 - Pressurised container: May burst if heated.

Aerosol 1: H222 - Extremely flammable aerosol.

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

STOT SE 3: H335 - May cause respiratory irritation. STOT SE 3: H336 - May cause drowsiness or dizziness.

Precautionary statements:



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SECTION 2: HAZARDS IDENTIFICATION (continued)

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.

P271+P260: To be used only in the open or in well ventilated areas. Do not breathe the dust/smoke/gas/mist/vapours/aerosol.

P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.

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

P501: Dispose of contents/container according to the separated collection system used in your municipality.

Substances that contribute to the classification

acetone; Xylene

UFI: 12MA-TVA2-C200-VMPJ

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

Mixture:

Chemical description: Aerosol

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

	Identification		Chemical name/Classification			
CAS:	67-64-1	acetone(1)		ATP CLP00		
EC: Index: REACH:	200-662-2 606-001-00-8 01-2119471330-49- XXXX	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	♦	25 - <50 %	
CAS:	1330-20-7	Xylene ⁽¹⁾		Self-classified		
	215-535-7 601-022-00-9 : 01-2119488216-32- XXXX	Regulation 1272/2008	Acute Tox. 4: H312+H332; Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Eye Irrit. 2: H319; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT RE 2: H373; STOT SE 3: H335 - Danger	1 4	10 - <25 %	
CAS:	74-98-6	Propane ⁽²⁾		ATP CLP00		
	200-827-9 601-003-00-5 : 01-2119486944-21- XXXX	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	⋄ �	10 - <25 %	
CAS:	106-97-8 203-448-7 601-004-00-0 : 01-2119474691-32- XXXX	Butane ⁽²⁾		ATP CLP00		
		Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	*	10 - <25 %	
CAS:	7440-50-8	Copper powder(1)		Self-classified		
	231-159-6 029-024-00-X 01-2119480154-42- XXXX	Regulation 1272/2008	Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 2: H411 - Warning	(!) (<u>*</u>	1 - <2,5 %	
CAS:	7440-66-6	Zinc powder - zinc d	ust (stabilised) ⁽¹⁾	ATP CLP00		
	231-175-3 030-002-00-7 01-2119467174-37- XXXX	Regulation 1272/2008	Aquatic Acute 1: H400; Aquatic Chronic 1: H410 - Warning	E	0,1 - <0,5 %	

⁽¹⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2015/830 (2) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES



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SECTION 4: FIRST AID MEASURES (continued)

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. In the case of loss of consciousness do not administer anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO2).

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:



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SECTION 6: ACCIDENTAL RELEASE MEASURES (continued)

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 °C

Maximum Temp.: 30 °C

Maximum time: 120 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

	Identification		Occupational exposure limits		
acetone		IOELV (8h)	500 ppm	1210 mg/m ³	
CAS: 67-64-1	EC: 200-662-2	IOELV (STEL)			
Xylene		IOELV (8h)	50 ppm	221 mg/m ³	
CAS: 1330-20-7	EC: 215-535-7	IOELV (STEL)	100 ppm	442 mg/m ³	

DNEL (Workers):

		Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local
acetone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 67-64-1	Dermal	Non-applicable	Non-applicable	186 mg/kg	Non-applicable
EC: 200-662-2	Inhalation	Non-applicable	2420 mg/m ³	1210 mg/m ³	Non-applicable
Xylene	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	212 mg/kg	Non-applicable
EC: 215-535-7	Inhalation	442 mg/m ³	442 mg/m ³	221 mg/m ³	221 mg/m ³
Copper powder	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7440-50-8	Dermal	273 mg/kg	Non-applicable	137 mg/kg	Non-applicable
EC: 231-159-6	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
Zinc powder - zinc dust (stabilised)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7440-66-6	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable
EC: 231-175-3	Inhalation	Non-applicable	Non-applicable	5 mg/m ³	Non-applicable

DNEL (General population):

		Short	Short exposure		Long exposure	
Identification		Systemic	Local	Systemic	Local	
acetone	Oral	Non-applicable	Non-applicable	62 mg/kg	Non-applicable	
CAS: 67-64-1	Dermal	Non-applicable	Non-applicable	62 mg/kg	Non-applicable	
EC: 200-662-2	Inhalation	Non-applicable	Non-applicable	200 mg/m ³	Non-applicable	
Xylene	Oral	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable	
CAS: 1330-20-7	Dermal	Non-applicable	Non-applicable	125 mg/kg	Non-applicable	
EC: 215-535-7	Inhalation	260 mg/m ³	260 mg/m ³	65,3 mg/m ³	65,3 mg/m ³	
Copper powder	Oral	Non-applicable	Non-applicable	0,041 mg/kg	Non-applicable	
CAS: 7440-50-8	Dermal	273 mg/kg	Non-applicable	137 mg/kg	Non-applicable	
EC: 231-159-6	Inhalation	Non-applicable	1 mg/m³	Non-applicable	1 mg/m³	
Zinc powder - zinc dust (stabilised)	Oral	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable	
CAS: 7440-66-6	Dermal	Non-applicable	Non-applicable	83 mg/kg	Non-applicable	
EC: 231-175-3	Inhalation	Non-applicable	Non-applicable	2,5 mg/m ³	Non-applicable	

PNEC:

Identification				
acetone	STP	100 mg/L	Fresh water	10,6 mg/L
CAS: 67-64-1	Soil	29,5 mg/kg	Marine water	1,06 mg/L
EC: 200-662-2	Intermittent	21 mg/L	Sediment (Fresh water)	30,4 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	3,04 mg/kg
Xylene	STP	6,58 mg/L	Fresh water	0,327 mg/L
CAS: 1330-20-7	Soil	2,31 mg/kg	Marine water	0,327 mg/L
EC: 215-535-7	Intermittent	0,327 mg/L	Sediment (Fresh water)	12,46 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	12,46 mg/kg
Copper powder	STP	0,23 mg/L	Fresh water	0,0078 mg/L
CAS: 7440-50-8	Soil	65 mg/kg	Marine water	0,0052 mg/L
EC: 231-159-6	Intermittent	Non-applicable	Sediment (Fresh water)	87 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	676 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Zinc powder - zinc dust (stabilised)	STP	0,1 mg/L	Fresh water	0,0206 mg/L
CAS: 7440-66-6	Soil	106,8 mg/kg	Marine water	0,0061 mg/L
EC: 231-175-3	Intermittent	Non-applicable	Sediment (Fresh water)	235,6 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	121 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	CAT III	EN 149:2001+A1:2009 EN 405:2002+A1:2010 EN ISO 136:1998	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected.

C.- Specific protection for the hands

P	ctogram	PPE	Labelling	CEN Standard	Remarks
Man	datory hand rotection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	CAT III	EN 420:2004+A1:2010	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory face protection	Panoramic glasses against splash/projections.	CATII	EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
Mandatory complete body protection	Antistatic and fireproof protective clothing	CAT III	EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.
Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	CAT III	EN ISO 13287:2013 EN ISO 20345:2011	Replace boots at any sign of deterioration.

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply): 79,36 % weight
V.O.C. density at 20 °C: 640 kg/m³ (640 g/L)

Average carbon number: 5,24

Average molecular weight: 79,65 g/mol

With regard to Directive 2004/42/EC, this product which is ready to use has the following characteristics:

V.O.C. density at 20 °C: 640 kg/m³ (640 g/L) EU limit for the product (Cat. B.E): 840 g/L (2010)

Components: Non-applicable

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 °C:

Appearance:

Colour:

Not available

Odour:

Characteristic

Odour threshold:

Non-applicable *

Volatility:

Boiling point at atmospheric pressure: -42 °C (Propellant)

Vapour pressure at 20 °C: Non-applicable *

Vapour pressure at 50 °C: <300000 Pa (300 kPa)

Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: Non-applicable * Relative density at 20 °C: Non-applicable * Dynamic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 20 °C: Non-applicable * Kinematic viscosity at 40 °C: <20,5 mm²/s Concentration: Non-applicable * pH: Non-applicable * Vapour density at 20 °C: Non-applicable * Partition coefficient n-octanol/water 20 °C: Non-applicable * Solubility in water at 20 °C: Non-applicable * Solubility properties: Non-applicable * Decomposition temperature: Non-applicable * Melting point/freezing point: Non-applicable * Recipient pressure: Non-applicable * *Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Flammability:

Flash Point:

Flammability (solid, gas):

Autoignition temperature:

Lower flammability limit:

Upper flammability limit:

Non-applicable *

Non-applicable *

Particle characteristics:

Median equivalent diameter: Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:

Oxidising properties:

Corrosive to metals:

Heat of combustion:

Aerosols-total percentage (by mass) of flammable components:

Non-applicable *

Non-applicable *

Other safety characteristics:

Surface tension at 20 °C:

Refraction index:

Non-applicable *

Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

- A- Ingestion (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
 - Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.
- B- Inhalation (acute effect):
 - Acute toxicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.
 - Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.
- C- Contact with the skin and the eyes (acute effect):
 - Contact with the skin: Produces skin inflammation.
 - Contact with the eyes: Produces eye damage after contact.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):
 - Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
 - IARC: Xylene (3); Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7 (3)
 - Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
 - Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- E- Sensitizing effects:
 - Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
 - Cutaneous: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- F- Specific target organ toxicity (STOT) single exposure:

Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
 - Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- H- Aspiration hazard:

The consumption of a considerable dose can cause pulmonary damage.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg	Rat
EC: 215-535-7	LC50 inhalation	11 mg/L (4 h) (ATEi)	
acetone	LD50 oral	5800 mg/kg	Rat
CAS: 67-64-1	LD50 dermal	7426 mg/kg	Rabbit
EC: 200-662-2	LC50 inhalation	76 mg/L (4 h)	Rat
Copper powder	LD50 oral	500 mg/kg (ATEi)	
CAS: 7440-50-8	LD50 dermal	Non-applicable	
EC: 231-159-6	LC50 inhalation	Non-applicable	



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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Butane	LD50 oral	Non-applicable	
CAS: 106-97-8	LD50 dermal	Non-applicable	
EC: 203-448-7	LC50 inhalation	658 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

Identification		Concentration	Species	Genus
acetone	LC50	5540 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 67-64-1	EC50	8800 mg/L (48 h)	Daphnia pulex	Crustacean
EC: 200-662-2	EC50	3400 mg/L (48 h)	Chlorella pyrenoidosa	Algae
Xylene	LC50	>10 - 100 (96 h)		Fish
CAS: 1330-20-7	EC50	>10 - 100 (48 h)		Crustacean
EC: 215-535-7	EC50	>10 - 100 (72 h)		Algae
Copper powder	LC50	>0.1 - 1 (96 h)		Fish
CAS: 7440-50-8	EC50	>0.1 - 1 (48 h)		Crustacean
EC: 231-159-6	EC50	>0.1 - 1 (72 h)		Algae
Zinc powder - zinc dust (stabilised)	LC50	0.31 mg/L (96 h)	N/A	Fish
CAS: 7440-66-6	EC50	1.22 mg/L (48 h)	Daphnia magna	Crustacean
EC: 231-175-3	EC50	Non-applicable		

Chronic toxicity:

Identification		Concentration	Species	Genus
acetone	NOEC	Non-applicable		
CAS: 67-64-1 EC: 200-662-2	NOEC	2212 mg/L	Daphnia magna	Crustacean
Xylene	NOEC	1.3 mg/L	Oncorhynchus mykiss	Fish
CAS: 1330-20-7 EC: 215-535-7	NOEC	1.17 mg/L	Ceriodaphnia dubia	Crustacean
Zinc powder - zinc dust (stabilised)	NOEC	0.44 mg/L	Oncorhynchus mykiss	Fish
CAS: 7440-66-6 EC: 231-175-3	NOEC	0.031 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:



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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Identification Degra		Biodegradal	Biodegradability	
acetone	BOD5	Non-applicable	Concentration	100 mg/L	
CAS: 67-64-1	COD	Non-applicable	Period	28 days	
EC: 200-662-2	BOD5/COD	Non-applicable	% Biodegradable	96 %	
Xylene	BOD5	Non-applicable	Concentration	Non-applicable	
CAS: 1330-20-7	COD	Non-applicable	Period	28 days	
EC: 215-535-7	BOD5/COD	Non-applicable	% Biodegradable	88 %	

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
acetone	BCF	1
CAS: 67-64-1	Pow Log	-0.24
EC: 200-662-2	Potential	Low
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
EC: 215-535-7	Potential	Low
Propane	BCF	13
CAS: 74-98-6	Pow Log	2.86
EC: 200-827-9	Potential	Low
Butane	BCF	33
CAS: 106-97-8	Pow Log	2.89
EC: 203-448-7	Potential	Moderate

12.4 Mobility in soil:

Identification	Absorpti	on/desorption	Volat	ility
acetone	Koc	1	Henry	2,93 Pa·m³/mol
CAS: 67-64-1	Conclusion	Very High	Dry soil	Yes
EC: 200-662-2	Surface tension	2,304E-2 N/m (25 °C)	Moist soil	Yes
Xylene	Koc	202	Henry	524,86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
EC: 215-535-7	Surface tension	Non-applicable	Moist soil	Yes
Propane	Koc	460	Henry	71636,78 Pa·m³/mol
CAS: 74-98-6	Conclusion	Moderate	Dry soil	Yes
EC: 200-827-9	Surface tension	7,02E-3 N/m (25 °C)	Moist soil	Yes
Butane	Koc	900	Henry	96258,75 Pa·m³/mol
CAS: 106-97-8	Conclusion	Low	Dry soil	Yes
EC: 203-448-7	Surface tension	1,187E-2 N/m (25 °C)	Moist soil	Yes



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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 04*	gases in pressure containers (including halons) containing hazardous substances	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP3 Flammable, HP6 Acute Toxicity, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

14.3 Transport hazard class(es): 2

 Labels: 2.1

 14.4 Packing group: N/A
 14.5 Environmental hazards: No

14.6 Special precautions for user

Special regulations: 190, 327, 344, 625

Tunnel restriction code: D

Physico-Chemical properties: see section 9

Limited quantities: 1 L

14.7 Transport in bulk according Non-applicable

to Annex II of Marpol and

the IBC Code:

Transport of dangerous goods by sea:

With regard to IMDG 39-18:



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SECTION 14: TRANSPORT INFORMATION (continued)

14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

 14.3
 Transport hazard class(es):
 2

 Labels:
 2.1

 14.4
 Packing group:
 N/A

 14.5
 Marine pollutant:
 No

14.6 Special precautions for user

to Annex II of Marpol and

Special regulations: 63, 959, 190, 277, 327, 344

EmS Codes: F-D, S-U
Physico-Chemical properties: see section 9

Limited quantities: 1 L

Segregation group: Non-applicable **14.7 Transport in bulk according** Non-applicable

the IBC Code: Transport of dangerous goods by air:

With regard to IATA/ICAO 2021:



14.1 UN number: UN1950

14.2 UN proper shipping name: AEROSOLS, flammable

 14.3
 Transport hazard class(es):
 2

 Labels:
 2.1

 14.4
 Packing group:
 N/A

14.5 Environmental hazards: No

14.6 Special precautions for user

Physico-Chemical properties: see section 9 **14.7 Transport in bulk according** Non-applicable **to Annex II of Marpol and**

the IBC Code:

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Copper powder (Product-type 2, 5, 11, 21)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Sect	tion	Description	Lower-tier requirements	Upper-tier requirements
P3	3a	FLAMMABLE AEROSOLS	150	500

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Regulation (EU) 2019/1148 on the marketing and use of explosives precursors: Contains acetone. Product under the provisions of Article 9. However, products that contain explosives precursors only to such a small extent and in such complex mixtures that the extraction of the explosives precursors is technically extremely difficult should be excluded from the scope of this Regulation. Shall not be used in:

- —ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- -tricks and jokes,
- —games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:



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SECTION 15: REGULATORY INFORMATION (continued)

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H315: Causes skin irritation.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

H412: Harmful to aquatic life with long lasting effects.

H373: May cause damage to organs through prolonged or repeated exposure (Oral).

H304: May be fatal if swallowed and enters airways.

H229: Pressurised container: May burst if heated.

H222: Extremely flammable aerosol.

H319: Causes serious eye irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed.

Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.

Aquatic Acute 1: H400 - Very toxic to aquatic life.

Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects. Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects. Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.

Eye Irrit. 2: H319 - Causes serious eye irritation. Flam. Gas 1A: H220 - Extremely flammable gas.

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

Flam. Liq. 3: H226 - Flammable liquid and vapour.

Press. Gas: H280 - Contains gas under pressure, may explode if heated.

Skin Irrit. 2: H315 - Causes skin irritation.

STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

STOT SE 3: H335 - May cause respiratory irritation.

STOT SE 3: H336 - May cause drowsiness or dizziness.

Classification procedure:

Skin Irrit. 2: Calculation method STOT SE 3: Calculation method STOT SE 3: Calculation method Aquatic Chronic 3: Calculation method STOT RE 2: Calculation method Asp. Tox. 1: Calculation method

Aerosol 1: Calculation method Eye Irrit. 2: Calculation method

Aerosol 1: Calculation method

Advice related to training:Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their



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SECTION 16: OTHER INFORMATION (continued)

comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:

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

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration 50 EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.