



ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 19-11-2012 Revision date: 26-3-2024 Supersedes version of: 27-9-2022 Version: 8.0

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

1.1. Product identifier

Product form : Mixture
Trade name : ALUSPRAY
UFI : 0Q00-6025-R007-4XN2
Product code : ZASP
Type of product : Spraying paint (spray can)
Vaporizer : Aerosol
Product group : Trade product

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

1.2.1. Relevant identified uses

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Industrial/Professional use spec : Paint
Coating
Function or use category : 55/999 Others

1.2.2. Uses advised against

Restrictions on use : All other areas of application to be agreed with the Application Engineering/ Technical Marketing Department of the manufacturer

1.3. Details of the supplier of the safety data sheet

ZINGAMETALL B.V.
Rozenstraat 4
B 9810 Eke
Belgium
T +32 9 385 68 81
info@zinga.be, www.zinga.eu

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Australia	NSW Poisons Information Centre The Children's Hospital at Westmead	Locked Bag 4001 NSW 2145 Westmead	13 11 26	
Belgium	Centre Anti-Poisons/Antigifcentrum c/o Hôpital Militaire Reine Astrid	Rue Bruyn 1 1120 Brussels	+32 70 245 245	Please dial: 070 245 245 for any urgent questions about intoxication (free of charge 24/7), if not accessible, dial: 02 264 96 30 (standard fee)
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	NHS 111/NHS 24/NHS Direct	Edinburgh	111 0845 4647	or call a doctor

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Aerosol, Category 2	H223;H229
Serious eye damage/eye irritation, Category 2	H319
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation	H335
Hazardous to the aquatic environment – Chronic Hazard, Category 3	H412
Full text of H- and EUH-statements: see section 16	

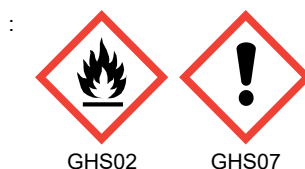
Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Flammable aerosol. May cause drowsiness or dizziness. May cause respiratory irritation. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP)



GHS02

GHS07

Signal word (CLP)

: Warning

Contains

: Hydrocarbons, C9, Aromatics; Acetone

Hazard statements (CLP)

: H223 - Flammable aerosol.
H229 - Pressurised container: May burst if heated.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : 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 fume, mist, spray, vapours.
P262 - Do not get in eyes, on skin, or on clothing.
P271 - Use only outdoors or in a well-ventilated area.
P301+P310+P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting.
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements : EUH066 - Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Other hazards which do not result in classification : If spilled, may cause the floor to be slippery.

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

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

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Comments : The classification as a carcinogen or mutagen does not apply because the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Acetone substance with a Community workplace exposure limit	CAS-No.: 67-64-1 EC-No.: 200-662-2 EC Index-No.: 606-001-00-8	25 - 35	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066
Hydrocarbons, C9, Aromatics (Note P)	CAS-No.: 128601-23-0 EC-No.: 918-668-5 REACH-no: 01-2119455851-35	5 - 15	Flam. Liq. 3, H226 STOT SE 3, H336 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066
Aluminium powder (stabilised)	CAS-No.: 7429-90-5 EC-No.: 231-072-3 EC Index-No.: 013-002-00-1 REACH-no: 01-2119529243-45	2,5 - 15	Flam. Sol. 1, H228

Note P: Note P : The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 + P310-P331 shall apply.

Product subject to CLP Article 1.1.3.7. The disclosure rules of the components is modified in this case.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

First-aid measures after ingestion : Rinse mouth out with water. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get immediate medical advice/attention.

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

Symptoms/effects : May cause drowsiness or dizziness. May cause respiratory irritation.

Symptoms/effects after inhalation : May cause drowsiness or dizziness. May cause headache, nausea and irritation of respiratory tract.

Symptoms/effects after skin contact : May cause moderate irritation. Repeated exposure may cause skin dryness or cracking.

Symptoms/effects after eye contact : Causes serious eye irritation.

Symptoms/effects after ingestion : Ingestion may cause nausea and vomiting. May be harmful if swallowed and enters airways.

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|--|
| Suitable extinguishing media | : Dry powder. Water spray. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a solid water stream as it may scatter and spread fire. |

5.2. Special hazards arising from the substance or mixture

- | | |
|------------------|--|
| Fire hazard | : Flammable aerosol. |
| Explosion hazard | : Pressurised container: May burst if heated. May form flammable/explosive vapour-air mixture. Take precautionary measures against static discharge. |

5.3. Advice for firefighters

- | | |
|--------------------------------|---|
| Precautionary measures fire | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep cool. Protect from sunlight. This product is not to be used under conditions of poor ventilation. |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |
| Other information | : Avoid release to the environment. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|------------------|--|
| General measures | : No open flames. No smoking. Eliminate every possible source of ignition. Use special care to avoid static electric charges. Avoid all eye and skin contact and do not breathe vapour and mist. Contact with walking surface may result in formation of slippery film/falling hazard. |
|------------------|--|

6.1.1. For non-emergency personnel

- | | |
|----------------------|--|
| Protective equipment | : For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate spillage area. No flames, no sparks. Eliminate all sources of ignition. |

6.1.2. For emergency responders

- | | |
|----------------------|---|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate area. Use grounded electrical/mechanical equipment. |

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|--|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Collect spillage. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. This material and its container must be disposed of in a safe way, and as per local legislation. |
| Other information | : Ventilate area. Contact with walking surface may result in formation of slippery film/falling hazard. |

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : Disposal considerations" .

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: In use, may form flammable vapour-air mixture. The vapours are denser than air and may travel along the ground. Distance ignition possible.
Precautions for safe handling	: Use only outdoors or in a well-ventilated area. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Wear personal protective equipment. Avoid breathing fume, mist, spray, vapours.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ensure adequate ventilation, especially in confined areas. Take precautionary measures against static discharge.
Storage conditions	: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep cool. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible products	: Oxidizing agent. Strong acids. Strong bases.
Incompatible materials	: Direct sunlight. Heat sources. Sources of ignition.
Maximum storage period	: ≥ 5 year
Information on mixed storage	: Store away from foodstuffs.

7.3. Specific end use(s)

For the relevant identified uses in accordance with section 1, the notes mentioned in this section 7 must be observed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Aluminium powder (stabilised) (7429-90-5)	
Belgium - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (metal and insoluble compounds, respirable fraction) 3 mg/m ³ (metal and insoluble compounds, inhalable fraction) 1 mg/m ³
Acetone (67-64-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Acetone
IOEL TWA	1210 mg/m ³
	500 ppm
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC
Belgium - Occupational Exposure Limits	
Local name	Acétone # Aceton
OEL TWA	594 mg/m ³
	246 ppm
OEL STEL	1187 mg/m ³
	492 ppm

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acetone (67-64-1)

Regulatory reference	Koninklijk besluit/Arrêté royal 11/05/2021
----------------------	--

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	300 mg/kg bw/day
--------------------------------------	------------------

DNEL/DMEL (General population)

Long-term - systemic effects, oral	300 mg/kg bw/day
------------------------------------	------------------

Long-term - systemic effects, inhalation	900 mg/m ³
--	-----------------------

Long-term - systemic effects, dermal	300 mg/kg bw/day
--------------------------------------	------------------

Hydrocarbons, C9, Aromatics (128601-23-0)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	25 mg/kg bodyweight/day
--------------------------------------	-------------------------

Long-term - systemic effects, inhalation	150 mg/m ³
--	-----------------------

DNEL/DMEL (General population)

Long-term - systemic effects, oral	11 mg/kg bodyweight/day
------------------------------------	-------------------------

Long-term - systemic effects, inhalation	32 mg/m ³
--	----------------------

Long-term - systemic effects, dermal	11 mg/kg bodyweight/day
--------------------------------------	-------------------------

Acetone (67-64-1)

DNEL/DMEL (Workers)

Acute - local effects, inhalation	2420 mg/m ³
-----------------------------------	------------------------

Long-term - systemic effects, dermal	186 mg/kg bodyweight/day
--------------------------------------	--------------------------

Long-term - systemic effects, inhalation	1210 mg/m ³
--	------------------------

DNEL/DMEL (General population)

Long-term - systemic effects, oral	62 mg/kg bodyweight/day
------------------------------------	-------------------------

Long-term - systemic effects, inhalation	200 mg/m ³
--	-----------------------

Long-term - systemic effects, dermal	62 mg/kg bodyweight/day
--------------------------------------	-------------------------

PNEC (Water)

PNEC aqua (freshwater)	10,6 mg/l
------------------------	-----------

PNEC aqua (marine water)	1,06 mg/l
--------------------------	-----------

PNEC aqua (intermittent, freshwater)	21 mg/l
--------------------------------------	---------

PNEC (Sediment)

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

PNEC sediment (marine water)	3,04 mg/kg dwt
------------------------------	----------------

PNEC (Soil)

PNEC soil	29,5 mg/kg dwt
-----------	----------------

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Acetone (67-64-1)	
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l
Methylal (109-87-5)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	17,9 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	126,6 mg/m³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	18,1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	31,5 mg/m³
Long-term - systemic effects, dermal	18,1 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	14577 mg/l
PNEC aqua (marine water)	1477 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	13135 mg/kg dwt
PNEC sediment (marine water)	13135 mg/kg dwt
PNEC (Soil)	
PNEC soil	46538 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 g/l

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses (EN 166)

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves against chemicals (EN 374)

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Protective gloves	Nitrile rubber (NBR), Viton® II, Fluoroelastomer (FKM)	6 (> 480 minutes)	≥ 0,38		EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Respiratory protection			
Device	Filter type	Condition	Standard
Reusable half mask	ABEK, Type P2	Vapour protection, Mist formation	EN 136, EN 140

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Silver grey.
Appearance	: Aerosol.
Odour	: aromatic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated. May form flammable/explosive vapour-air mixture.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: -104 °C (Propellant gas)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
SADT	: Not applicable
pH	: Not available
Viscosity, kinematic	: > 21 mm²/s
Non-Newtonian liquid	: Thixotropic behaviour
Solubility	: Material insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 0,671 g/cm³ (±0.1 g/cm³) (@20°C) (Without propellant)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

% of flammable ingredients : 90 %

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

9.2.2. Other safety characteristics

SAPT : Not applicable
VOC content : 619 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable aerosol. Pressurised container: May burst if heated.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

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

Aluminium powder (stabilised) (7429-90-5)

LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h
-----------------------------------	-------------

Hydrocarbons, C9, Aromatics (128601-23-0)

LD50 oral rat	3492 mg/kg (OECD 401 method)
LD50 dermal rabbit	3160 mg/kg (OECD 402 method)
LD50, Inhalation, rat	> 6193 mg/m ³ (OECD 403 method)

Acetone (67-64-1)

LD50 oral rat	5800 mg/kg bodyweight Animal: rat, Animal sex: female
LD50 dermal rabbit	> 7400 mg/kg Source: ECHA
LC50 Inhalation - Rat	76 mg/l/4h Animal: rat, Animal sex: female, 95% CL: 65,2 - 88,4
LC50 Inhalation - Rat (Vapours)	76 mg/l Source: ECHA

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

Acetone (67-64-1)

pH	5 Source: ECHA
----	----------------

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Serious eye damage/irritation	: Causes serious eye irritation.
Additional information	: The product has not been tested. The statement has been derived from the properties of the individual components.

Acetone (67-64-1)	
pH	5 Source: ECHA

Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
STOT-single exposure	: May cause drowsiness or dizziness. May cause respiratory irritation.
Additional information	: The product has not been tested. The statement has been derived from the properties of the individual components.

Hydrocarbons, C9, Aromatics (128601-23-0)	
STOT-single exposure	May cause drowsiness or dizziness. May cause respiratory irritation.

Acetone (67-64-1)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)

ALUSPRAY	
Vaporizer	Aerosol
Viscosity, kinematic	> 21 mm ² /s

Aluminium powder (stabilised) (7429-90-5)	
Viscosity, kinematic	Not applicable

Hydrocarbons, C9, Aromatics (128601-23-0)	
Viscosity, kinematic	< 1 mm ² /s @20°C
Hydrocarbon	Yes

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
Ecology - water	: Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met) (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Harmful to aquatic life with long lasting effects.
Not rapidly degradable	
Additional information	: No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Hydrocarbons, C9, Aromatics (128601-23-0)	
LC50 - Fish [1]	9,2 mg/l (Oncorhynchus mykiss (Rainbow trout))
EC50 - Crustacea [1]	3,2 mg/l (Daphnia magna (Water flea))
EC50 72h - Algae [1]	2,9 mg/l
NOEC chronic fish	1,23 mg/l (Oncorhynchus mykiss (Rainbow trout), 28 days)
NOEC chronic crustacea	2,14 mg/l (21 days, Daphnia magna (Water flea))
NOEC chronic algae	1 mg/l (Pseudokirchneriella subcapitata, 72 Hours)

Acetone (67-64-1)	
LC50 - Fish [1]	5540 mg/l Source: ECHA
LOEC (chronic)	> 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 79 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

Hydrocarbons, C9, Aromatics (128601-23-0)	
Persistence and degradability	Readily biodegradable.
Biodegradation	78 % (28 days (OECD 301F method))

12.3. Bioaccumulative potential

Hydrocarbons, C9, Aromatics (128601-23-0)	
Partition coefficient n-octanol/water (Log Pow)	< 4,5
Bioaccumulative potential	No bioaccumulation data available.

Acetone (67-64-1)	
Partition coefficient n-octanol/water (Log Pow)	-0,24 Source: ICSC

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Do not discharge into drains or the environment.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use.
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecological information	: Avoid release to the environment.

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

European List of Waste (LoW, EC 2000/532)	: 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances 15 01 10* - packaging containing residues of or contaminated by dangerous substances 16 05 04* - gases in pressure containers (including halons) containing dangerous substances
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment HP15 - "Waste capable of exhibiting a hazardous property listed above not directly displayed by the original waste".

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name				
AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics)	AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics)	Aerosols, flammable (CONTAINS : Hydrocarbons, C9, Aromatics)	AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics)	AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics)
Transport document description				
UN 1950 AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics), 2.1, (D)	UN 1950 AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics), 2.1 (-104°C c.c.)	UN 1950 Aerosols, flammable (CONTAINS : Hydrocarbons, C9, Aromatics), 2.1	UN 1950 AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics), 2.1	UN 1950 AEROSOLS (CONTAINS : Hydrocarbons, C9, Aromatics), 2.1
14.3. Transport hazard class(es)				
2.1	2.1	2.1	2.1	2.1
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

ADR	IMDG	IATA	ADN	RID
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP200
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
EmS-No. (Fire)	: F-D
EmS-No. (Spillage)	: S-U
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69
Flash point (IMDG)	: -104°C (Propellant gas (Aerosol))

Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Y203
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 203
PCA max net quantity (IATA)	: 75kg
CAO packing instructions (IATA)	: 203
CAO max net quantity (IATA)	: 150kg
Special provisions (IATA)	: A145, A167, A802
ERG code (IATA)	: 10L

Inland waterway transport

Classification code (ADN)	: 5F
Special provisions (ADN)	: 190, 327, 344, 625
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP, EX, A
Ventilation (ADN)	: VE01, VE04
Number of blue cones/lights (ADN)	: 1

Rail transport

Classification code (RID)	: 5F
Special provisions (RID)	: 190, 327, 344, 625
Limited quantities (RID)	: 1L

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Excepted quantities (RID)	: E0
Packing instructions (RID)	: P207, LP200
Special packing provisions (RID)	: PP87, RR6, L2
Mixed packing provisions (RID)	: MP9
Transport category (RID)	: 2
Special provisions for carriage – Packages (RID)	: W14
Special provisions for carriage - Loading, unloading and handling (RID)	: CW9, CW12
Colis express (express parcels) (RID)	: CE2
Hazard identification number (RID)	: 23

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)	
Reference code	Applicable on
3(a)	ALUSPRAY ; Hydrocarbons, C9, Aromatics ; Acetone
3(b)	ALUSPRAY ; Hydrocarbons, C9, Aromatics ; Acetone
3(c)	ALUSPRAY ; Hydrocarbons, C9, Aromatics
40.	Aluminium powder (stabilised) ; Hydrocarbons, C9, Aromatics ; Acetone

REACH Annex XIV (Authorisation List)

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

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

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

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (1005/2009)

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

VOC Directive (2004/42)

VOC content : 619 g/l

Explosives Precursors Regulation (2019/1148)

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

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

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

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

Please see https://home-affairs.ec.europa.eu/policies/internal-security/counter-terrorism-and-radicalisation/protection/legislation-chemicals-used-home-made-explosives_en

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Drug Precursors Regulation (273/2004)

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

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

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
1.2	Organic solvent	Removed	
2.2	Precautionary statements (CLP)	Modified	
3	Composition/information on ingredients	Modified	
4.1	First-aid measures after eye contact	Modified	
4.1	First-aid measures after skin contact	Modified	
4.1	First-aid measures after ingestion	Modified	
4.1	First-aid measures after inhalation	Modified	
4.1	First-aid measures general	Modified	
4.2	Symptoms/effects after skin contact	Modified	
4.2	Symptoms/effects after ingestion	Modified	
5.1	Unsuitable extinguishing media	Modified	
5.1	Suitable extinguishing media	Modified	
5.2	Hazardous decomposition products in case of fire	Removed	
5.2	Explosion hazard	Modified	
5.3	Other information	Modified	
5.3	Firefighting instructions	Modified	
6.1	Emergency procedures	Modified	
6.1	Emergency procedures	Modified	
6.1	General measures	Modified	
6.2	Environmental precautions	Modified	
6.3	Other information	Modified	
6.3	Methods for cleaning up	Modified	
6.4	Reference to other sections (8, 13)	Modified	
7.1	Hygiene measures	Modified	
7.1	Precautions for safe handling	Modified	
7.1	Additional hazards when processed	Modified	

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Indication of changes			
Section	Changed item	Change	Comments
7.2	Storage area	Removed	
7.2	Maximum storage period	Added	
7.2	Incompatible products	Modified	
9.1	Explosive properties	Modified	
9.1	Non-Newtonian liquid	Added	
9.1	SAPT	Added	
9.1	Solubility	Added	
9.1	Decomposition temperature	Added	
9.1	Flash point	Modified	
9.2	VOC content	Added	
9.2	SADT	Added	
10.5	Incompatible materials	Modified	
11.1	Additional information	Added	
11.1	Additional information	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Additional information	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
11.1	Reason for no classification	Added	
12.1	Reason for no classification	Added	
13.1	Ecology - waste materials	Modified	
13.1	Additional information	Modified	
13.1	European List of Waste (LoW, EC 2000/532)	Added	
14.6	Flash point (IMDG)	Added	
14.6	Limited quantities (IMDG)	Added	
14.6	Excepted quantities (IMDG)	Added	
15.1	VOC content	Added	

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Full text of H- and EUH-statements:	
Aerosol 2	Aerosol, Category 2
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.

ALUSPRAY

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
Flam. Sol. 1	Flammable solids, Category 1
H223	Flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H228	Flammable solid.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Aerosol 2	H223;H229	On basis of test data
Eye Irrit. 2	H319	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	Calculation method
Aquatic Chronic 3	H412	Calculation method

The classification complies with : ATP 12

Safety Data Sheet (SDS), EU, ZINGAMETALL 2024

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