PAINT.GUIDE



PAINT.GUIDE Silver 400 ml

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

1.1 Product identifier: PAINT.GUIDE Silver 400 ml

Other means of identification:

EAN: 6418091102314

UFI: 84C4-9963-100Y-CMVU

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

Relevant uses: Aerosol can product for recreational and decorative purposes

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:

Rakennuskemia Oy
Kerkkolankatu 17
05800 Hyvinkää - Finland
Phone: +358 19 4574400
info@rakennuskemia.com
www.rakennuskemia.com

1.4 Emergency telephone number: Emergency: 112. Poison information center Helsinki, open 24 h/day+358 9 471 977 (direct); +358 9 4711 (central)

SECTION 2: HAZARDS IDENTIFICATION **

2.1 Classification of the substance or mixture:

Hazard-determining components of labelling: acetone, 2-methoxy-1-methylethyl acetate, n-butyl acetate, butan-1-ol

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: Flammable aerosols, Category 1, H222
Aerosol 1: Pressurised container: May burst if heated., H229
Eye Irrit. 2: Eye irritation, Category 2, H319
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: H222 - Extremely flammable aerosol.
Aerosol 1: H229 - Pressurised container: May burst if heated.
Eye Irrit. 2: H319 - Causes serious eye irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

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 spray.
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F
P501: Dispose of contents / container in accordance with regional regulations.

Supplementary information:

EUH066: Repeated exposure may cause skin dryness or cracking.

Additional labeling:

*** Changes with regards to the previous version*

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SECTION 2: HAZARDS IDENTIFICATION ** (continued)

Buildup of explosive mixtures possible without sufficient ventilation.

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

*** Changes with regards to the previous version*

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS **

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

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

Identification	Chemical name/Classification		Concentration
CAS: 67-64-1 EC: 200-662-2 Index: 606-001-00-8 REACH: 01-2119471330-49-XXXX	**Acetone**(1)	ATP CLP00	**25 - <50 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger	
CAS: 115-10-6 EC: 204-065-8 Index: 603-019-00-8 REACH: 01-2119472128-37-XXXX	**Dimethyl Ether**(1)	ATP CLP00	**20 - <25 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	
CAS: 108-65-6 EC: 203-603-9 Index: 607-195-00-7 REACH: 01-2119475791-29-XXXX	**2-methoxy-1-methylethyl acetate**(1)	Self-classified	**10 - <12.5 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336 - Warning	
CAS: 74-98-6 EC: 200-827-9 Index: 601-003-00-5 REACH: 01-2119486944-21-XXXX	**Propane**(1)	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	
CAS: 75-28-5 EC: 200-857-2 Index: 601-004-00-0 REACH: 01-2119485395-27-XXXX	**Isobutane**(1)	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	
CAS: 106-97-8 EC: 203-448-7 Index: 601-004-00-0 REACH: 01-2119474691-32-XXXX	**Butane**(1)	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Flam. Gas 1A: H220; Press. Gas: H280 - Danger	
CAS: 123-86-4 EC: 204-658-1 Index: 607-025-00-1 REACH: 01-2119485493-29-XXXX	**N-butyl acetate**(1)	ATP CLP00	**5 - <10 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; STOT SE 3: H336; EUH066 - Warning	
CAS: 7429-90-5 EC: Non-applicable Index: Non-applicable REACH: Non-applicable	**Aluminium powder (stabilised)**(1)	ATP ATP01	**<2.5 %**
	Regulation 1272/2008	Pyr. Sol. 1: H250; Water-react. 2: H261 - Danger	
CAS: 71-36-3 EC: 200-751-6 Index: 603-004-00-6 REACH: 01-2119484630-38-XXXX	**butan-1-ol**(1)	ATP CLP00	**<2.5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger	

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

*** Changes with regards to the previous version*

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS ** (continued)

Identification	Chemical name/Classification		Concentration
CAS: 9004-70-0 EC: 682-719-5 Index: 603-037-00-6 REACH: Non-applicable	**Cellulose nitrate(1)**	Self-classified	**<2.5 %**
	Regulation 1272/2008	Expl. 1.1: H201 - Danger	
CAS: Non-applicable EC: 905-588-0 Index: Non-applicable REACH: 01-2119488216-32-XXXX	**Xylene(1)**	Self-classified	**<2.5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Eye Dam. 1: H318; Flam. Liq. 3: H226; Skin Irrit. 2: H315; STOT SE 3: H335; STOT SE 3: H336 - Danger	

(1) Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

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

Other information:

Identification	Specific concentration limit
Cellulose nitrate CAS: 9004-70-0 EC: 682-719-5	% (w/w) >=75.01: Expl. 1.1 - H201 % (w/w) >=1: Desen. Expl. 2 - H207

CAS 9004-70-0: GB CLP Note T

For the wording of the listed hazard phrases refer to section 16.

*** Changes with regards to the previous version*

SECTION 4: FIRST AID MEASURES

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 lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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 (CO_2).

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SECTION 5: FIREFIGHTING MEASURES (continued)

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:

In case of fire follow the instructions on the Internal Emergency Plan

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:

AVOID CONTACT WITH WATER. Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those who do not have 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:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:

DO NOT USE WATER TO CLEAN.

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.- General precautions for safe use

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

It is recommended to transfer at a slow speed to avoid the creation of electrostatic charges that could affect flammable products. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

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

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

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SECTION 7: HANDLING AND STORAGE (continued)

Store in a cool, dry, well-ventilated location

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):

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 CAS: 67-64-1 EC: 200-662-2	IOELV (8h)	500 ppm	1210 mg/m³
	IOELV (STEL)		
Dimethyl Ether CAS: 115-10-6 EC: 204-065-8	IOELV (8h)	1000 ppm	1920 mg/m³
	IOELV (STEL)		
2-methoxy-1-methylethyl acetate CAS: 108-65-6 EC: 203-603-9	IOELV (8h)	50 ppm	275 mg/m³
	IOELV (STEL)	100 ppm	550 mg/m³
N-butyl acetate CAS: 123-86-4 EC: 204-658-1	IOELV (8h)	50 ppm	241 mg/m³
	IOELV (STEL)	150 ppm	723 mg/m³

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	CE 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

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)	CE CAT III	EN ISO 21420:2020	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.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Face shield	CE CAT II	EN 166:2002 EN 167:2002 EN 168:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	CE CAT III	EN 1149-1,2,3 EN 13034:2005+A1:2009 EN ISO 13982-1:2004/A1:2010 EN ISO 6529:2013 EN ISO 6530:2005 EN ISO 13688:2013 EN 464:1994	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	CE CAT III	EN ISO 13287:2020 EN ISO 20345:2011 EN 13832-1:2019	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

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 ºC:	Aerosol
Appearance:	Not available
Colour:	According to the markings on the package
Odour:	Solvent
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 ºC:	399994 Pa
Vapour pressure at 50 ºC:	Non-applicable *
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	Non-applicable *
Relative density at 20 ºC:	0,7
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	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)

Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Immiscible
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Recipient pressure:	Non-applicable *
Flammability:	
Flash Point:	Non-applicable
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	240 ºC (Propellant)
Lower flammability limit:	1,5 % Volume
Upper flammability limit:	26,2 % Volume
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

VOC (EC) 690.2 g/l
VOC-EU% 93.93 %

*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 indicated 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
Precaution	Precaution	Risk of combustion	Avoid direct impact	Precaution

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Precaution	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 (CO_2), carbon monoxide and other organic compounds.

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SECTION 11: TOXICOLOGICAL INFORMATION **

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

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

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

Dangerous health implications:

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: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- 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 hazardous for the effects mentioned. For more information see section 3.
  IARC: Xylene (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous 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 hazardous 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 hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single 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.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Repeated exposure may cause skin dryness or cracking

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

*** Changes with regards to the previous version*

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SECTION 11: TOXICOLOGICAL INFORMATION ** (continued)

Identification	Acute toxicity		Genus
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
Propane	LD50 oral	>2000 mg/kg	
CAS: 74-98-6	LD50 dermal	>2000 mg/kg	
EC: 200-827-9	LC50 inhalation	>5 mg/L	
Isobutane	LD50 oral	>2000 mg/kg	
CAS: 75-28-5	LD50 dermal	>2000 mg/kg	
EC: 200-857-2	LC50 inhalation	>5 mg/L	
Butane	LD50 oral	>2000 mg/kg	
CAS: 106-97-8	LD50 dermal	>2000 mg/kg	
EC: 203-448-7	LC50 inhalation	658 mg/L (4 h)	Rat
Dimethyl Ether	LD50 oral	>2000 mg/kg	
CAS: 115-10-6	LD50 dermal	>2000 mg/kg	
EC: 204-065-8	LC50 inhalation	308,5 mg/L (4 h)	Rat
2-methoxy-1-methylethyl acetate	LD50 oral	8532 mg/kg	Rat
CAS: 108-65-6	LD50 dermal	>5000 mg/kg	Rat
EC: 203-603-9	LC50 inhalation	30 mg/L (4 h)	Rat
N-butyl acetate	LD50 oral	12789 mg/kg	Rat
CAS: 123-86-4	LD50 dermal	14112 mg/kg	Rabbit
EC: 204-658-1	LC50 inhalation	23,4 mg/L (4 h)	Rat
Aluminium powder (stabilised)	LD50 oral	>2000 mg/kg	
CAS: 7429-90-5	LD50 dermal	>2000 mg/kg	
EC: Non-applicable	LC50 inhalation	>5 mg/L	
butan-1-ol	LD50 oral	800 mg/kg	Rat
CAS: 71-36-3	LD50 dermal	3430 mg/kg	Rabbit
EC: 200-751-6	LC50 inhalation	24,66 mg/L (4 h)	Rat
Cellulose nitrate	LD50 oral	>2000 mg/kg	
CAS: 9004-70-0	LD50 dermal	>2000 mg/kg	
EC: 682-719-5	LC50 inhalation	>5 mg/L	
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: Non-applicable	LD50 dermal	1100 mg/kg	Rat
EC: 905-588-0	LC50 inhalation	11 mg/L (4 h)	Rat

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

*** Changes with regards to the previous version*

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:

*** Changes with regards to the previous version*

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

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
2-methoxy-1-methylethyl acetate	LC50	161 mg/L (96 h)	Pimephales promelas	Fish
CAS: 108-65-6	EC50	481 mg/L (48 h)	Daphnia sp.	Crustacean
EC: 203-603-9	EC50	Non-applicable		
N-butyl acetate	LC50	Non-applicable		
CAS: 123-86-4	EC50	Non-applicable		
EC: 204-658-1	EC50	675 mg/L (72 h)	Scenedesmus subspicatus	Algae
butan-1-ol	LC50	1740 mg/L (96 h)	Pimephales promelas	Fish
CAS: 71-36-3	EC50	1983 mg/L (48 h)	Daphnia magna	Crustacean
EC: 200-751-6	EC50	500 mg/L (96 h)	Scenedesmus subspicatus	Algae

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
2-methoxy-1-methylethyl acetate	NOEC	47,5 mg/L	Oryzias latipes	Fish
CAS: 108-65-6 EC: 203-603-9	NOEC	100 mg/L	Daphnia magna	Crustacean
N-butyl acetate	NOEC	Non-applicable		
CAS: 123-86-4 EC: 204-658-1	NOEC	23,2 mg/L	Daphnia magna	Crustacean
Aluminium powder (stabilised)	NOEC	0,4 mg/L	Pimephales promelas	Fish
CAS: 7429-90-5 EC: Non-applicable	NOEC	1,02 mg/L	Ceriodaphnia dubia	Crustacean
butan-1-ol	NOEC	Non-applicable		
CAS: 71-36-3 EC: 200-751-6	NOEC	4,1 mg/L	Daphnia magna	Crustacean
Xylene	NOEC	1,3 mg/L	Oncorhynchus mykiss	Fish
CAS: Non-applicable EC: 905-588-0	NOEC	1,17 mg/L	Ceriodaphnia dubia	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		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 %
2-methoxy-1-methylethyl acetate	BOD5	Non-applicable	Concentration	785 mg/L
CAS: 108-65-6	COD	Non-applicable	Period	8 days
EC: 203-603-9	BOD5/COD	Non-applicable	% Biodegradable	100 %
N-butyl acetate	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 123-86-4	COD	Non-applicable	Period	5 days
EC: 204-658-1	BOD5/COD	Non-applicable	% Biodegradable	84 %
butan-1-ol	BOD5	1,71 g O2/g	Concentration	Non-applicable
CAS: 71-36-3	COD	2,46 g O2/g	Period	19 days
EC: 200-751-6	BOD5/COD	0,7	% Biodegradable	98 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Acetone	BCF	1
CAS: 67-64-1	Pow Log	-0.24
EC: 200-662-2	Potential	Low

*** Changes with regards to the previous version*

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Identification	Bioaccumulation potential	
Propane	BCF	13
CAS: 74-98-6	Pow Log	2.86
EC: 200-827-9	Potential	Low
Isobutane	BCF	27
CAS: 75-28-5	Pow Log	2.76
EC: 200-857-2	Potential	Low
Butane	BCF	33
CAS: 106-97-8	Pow Log	2.89
EC: 203-448-7	Potential	Moderate
2-methoxy-1-methylethyl acetate	BCF	1
CAS: 108-65-6	Pow Log	0.43
EC: 203-603-9	Potential	Low
N-butyl acetate	BCF	4
CAS: 123-86-4	Pow Log	1.78
EC: 204-658-1	Potential	Low
butan-1-ol	BCF	1
CAS: 71-36-3	Pow Log	0.88
EC: 200-751-6	Potential	Low
Xylene	BCF	9
CAS: Non-applicable	Pow Log	2.77
EC: 905-588-0	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
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 ºC)	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 ºC)	Moist soil	Yes
Isobutane	Koc	35	Henry	120576,75 Pa·m³/mol
CAS: 75-28-5	Conclusion	Very High	Dry soil	Yes
EC: 200-857-2	Surface tension	9,84E-3 N/m (25 ºC)	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 ºC)	Moist soil	Yes
Dimethyl Ether	Koc	Non-applicable	Henry	Non-applicable
CAS: 115-10-6	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-065-8	Surface tension	1,136E-2 N/m (25 ºC)	Moist soil	Non-applicable
N-butyl acetate	Koc	Non-applicable	Henry	Non-applicable
CAS: 123-86-4	Conclusion	Non-applicable	Dry soil	Non-applicable
EC: 204-658-1	Surface tension	2,478E-2 N/m (25 ºC)	Moist soil	Non-applicable
butan-1-ol	Koc	2.44	Henry	5,39E-2 Pa·m³/mol
CAS: 71-36-3	Conclusion	Very High	Dry soil	Yes
EC: 200-751-6	Surface tension	2,567E-2 N/m (25 ºC)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

*** Changes with regards to the previous version*

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SECTION 12: ECOLOGICAL INFORMATION ** (continued)

Not described

*** Changes with regards to the previous version*

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):

HP3 Flammable, HP5 Specific Target Organ Toxicity (STOT)/Aspiration 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. Waste should not be disposed of to drains. 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 or ID number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
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	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:

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SECTION 14: TRANSPORT INFORMATION (continued)



14.1	**UN number or ID number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
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**	
	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	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2023:



14.1	**UN number or ID number:**	UN1950
14.2	**UN proper shipping name:**	AEROSOLS
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	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

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: Non-applicable

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

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P3a	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 (COMMISSION REGULATION (EU) 2020/878).

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

COMMISSION REGULATION (EU) 2020/878
COMPOSITION/INFORMATION ON INGREDIENTS (SECTION 3, SECTION 11, SECTION 12):
· New declared substances
N-butyl acetate (123-86-4)
butan-1-ol (71-36-3)
Dimethyl Ether (115-10-6)
Aluminium powder (stabilised) (7429-90-5)
Cellulose nitrate (9004-70-0)
2-methoxy-1-methylethyl acetate (108-65-6)
Xylene
· Removed substances
Hydrocarbons, C9-C11, n-alkaner, isoalkaner, cykliska, <2% (64742-48-9)
Oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1) (34140-91-5)
Substances that contribute to the classification (SECTION 2):
· Removed substances
Acetone (67-64-1)
Hydrocarbons, C9-C11, n-alkaner, isoalkaner, cykliska, <2% (64742-48-9)
CLP Regulation (EC) No 1272/2008 (SECTION 2, SECTION 16):
· Precautionary statements

Texts of the legislative phrases mentioned in section 2:

H222: Extremely flammable aerosol.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H229: Pressurised container: May burst if heated.

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.
Expl. 1.1: H201 - Explosive, mass explosion hazard.
Eye Dam. 1: H318 - Causes serious eye damage.
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.
Pyr. Sol. 1: H250 - Catches fire spontaneously if exposed to air.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.
Water-react. 2: H261 - In contact with water releases flammable gases.

Advice related to training:

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SECTION 16: OTHER INFORMATION (continued)

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their 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.

- END OF SAFETY DATA SHEET -