

Horizont Silberspray

Print date: 11.08.2016

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

1.1. Product identifier

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

Use of the substance/mixture

Pet care

1.3. Details of the supplier of the safety data sheet

Company name:	Friedrich Huber aeronova GmbH & Co.KG	
Street:	Sobrigauer Weg 4	
Place:	D-01257 Dresden	
Telephone:	0049-(0)351-27046-0	Telefax: 0049-(0)351-2704616
e-mail:	info@aeronova.de	
e-mail (Contact person):	labor@aeronova.de	
Internet:	www.aeronova.de	
Responsible Department:	laboratory	

1.4. Emergency telephone number: 0049-(0)351-27046-0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Aerosol: Aerosol 1

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes serious eye irritation.

May cause drowsiness or dizziness.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Aceton; 2-Propanon; Propanon

propan-2-ol; isopropyl alcohol; isopropanol

Ethylacetat

Signal word: Danger

Pictograms:



Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Precautionary statements

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.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

In case of insufficient ventilation and/or through use, explosive/highly flammable mixtures may develop.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
106-97-8	butane			30 - < 35 %
	203-448-7		01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			
67-64-1	Aceton; 2-Propanon; Propanon			20 - < 25 %
	200-662-2		01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			20 - < 25 %
	200-661-7		01-2119457558-25	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336			
74-98-6	propane			15 - < 20 %
	200-827-9		01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
141-78-6	Ethylacetat			1 - < 2.5 %
	205-500-4		01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

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General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Provide fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Observe risk of aspiration if vomiting occurs. If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.

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

No information available.

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

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

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6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not pierce or burn, even after use. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Do not spray on naked flames or any incandescent material. Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

Further information on handling

Heating causes rise in pressure with risk of bursting.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

Further information on storage conditions

Keep away from food, drink and animal feedingstuffs.

7.3. Specific end use(s)

Pet care

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		STEL (15 min)	WEL
7429-90-5	Aluminium metal, respirable dust	-	4		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL
67-63-0	Propan-2-ol	400	999		TWA (8 h)	WEL
		500	1250		STEL (15 min)	WEL

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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
67-64-1	Aceton; 2-Propanon; Propanon			
Worker DNEL, long-term		dermal	systemic	186 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1210 mg/m³
Worker DNEL, acute		inhalation	local	2420 mg/m³
Consumer DNEL, long-term		dermal	systemic	62 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	200 mg/m³
Consumer DNEL, long-term		oral	systemic	62 mg/kg bw/day
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
Worker DNEL, long-term		dermal	systemic	888 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	500 mg/m³
Consumer DNEL, long-term		dermal	systemic	319 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	89 mg/m³
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day

PNEC values

CAS No	Substance	
Environmental compartment		Value
67-64-1	Aceton; 2-Propanon; Propanon	
Freshwater		10,6 mg/l
Marine water		1,06 mg/l
Freshwater sediment		30,4 mg/kg
Marine sediment		3,04 mg/kg
Soil		29,5 mg/kg

8.2. Exposure controls

Appropriate engineering controls

If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Wear eye/face protection. Suitable eye protection: Eye glasses with side protection DIN EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. DIN EN 374

Suitable material: Butyl caoutchouc (butyl rubber) (0,5 mm) Breakthrough time (maximum wearing time): < 240 min

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves

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mentioned above together with the supplier of these gloves.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

Usually no personal respirative protection necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	silver
Odour:	like: Alcohol

Test method

pH-Value:	not applicable
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Changes in the physical state

Melting point:	not applicable
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Initial boiling point and boiling range:	< -20 °C
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Flash point:	< -20 °C
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Sustaining combustion:	No data available
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Flammability

Solid:	not applicable
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Gas:	not applicable
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Explosive properties

In use, may form flammable/explosive vapour-air mixture.

Lower explosion limits:	1,4 vol. %
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Upper explosion limits:	14,3 vol. %
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Ignition temperature:	365 °C
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Auto-ignition temperature

Solid:	not applicable
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Gas:	not applicable
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Decomposition temperature:	not determined
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Oxidizing properties

Not oxidizing.

Vapour pressure:	not determined
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Density (at 20 °C):	0,65 g/cm ³ calculated.
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Water solubility: (at 20 °C)	practically insoluble
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Solubility in other solvents

not determined

Partition coefficient:	not determined
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Viscosity / dynamic:	not applicable
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Vapour density:	not determined
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Evaporation rate:	not determined
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9.2. Other information

Solid content:

not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable, Ignition hazard.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name			
	Exposure route	Dose	Species	Source
67-64-1	Aceton; 2-Propanon; Propanon			
	oral	LD50 5800 mg/kg	Rat	RTECS
	dermal	LD50 >15800 mg/kg	Rabbit	IUCLID
	inhalative (4 h) vapour	LC50 76 mg/l	Rat	
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	oral	LD50 5840 mg/kg	Rat	
	dermal	LD50 13900 mg/kg	Rabbit	
	inhalative (4 h) vapour	LC50 47,5 mg/l	Rat	
141-78-6	Ethylacetat			
	oral	LD50 5620 mg/kg	Rat	
	dermal	LD50 18000 mg/kg	Rat	

Irritation and corrosivity

Causes serious eye irritation.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

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Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. (Aceton; 2-Propanon; Propanon), (propan-2-ol; isopropyl alcohol; isopropanol), (Ethylacetat)

STOT-repeated exposure

Repeated exposure may cause skin dryness or cracking.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

The product is not: Ecotoxic.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	
67-64-1	Aceton; 2-Propanon; Propanon					
	Acute fish toxicity	LC50	8120 mg/l	96 h	Pimephales promelas	OECD Guideline 203
	Acute crustacea toxicity	EC50	8800 mg/l	48 h	Daphnia magna (Big water flea)	
	Algae toxicity	NOEC	430 mg/l	4 d		
	Crustacea toxicity	NOEC	2212 mg/l	28 d	Daphnia magna	ECHA
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol					
	Acute fish toxicity	LC50	9640 mg/l	96 h	Pimephales promelas	OECD Guideline 203
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	13299 mg/l	48 h	Daphnia magna (Big water flea)	
	Acute bacteria toxicity	(>100 mg/l)				
74-98-6	propane					
	Acute fish toxicity	LC50	27,98 mg/l	96 h	Fish, no other information	ECHA
	Acute algae toxicity	ErC50	7,71 mg/l	96 h	Green algae	ECHA
141-78-6	Ethylacetat					
	Acute fish toxicity	LC50	230 mg/l	96 h	Pimephales promelas	US EPA method E03-05
	Acute algae toxicity	ErC50	3300 mg/l	96 h	Desmodesmus subspicatus	
	Acute crustacea toxicity	EC50	717 mg/l	48 h	Daphnia magna (Big water flea)	
	Fish toxicity	NOEC	< 9,65 mg/l	32 d	Pimephales promelas	OECD Guideline 210
	Crustacea toxicity	NOEC	2,4 mg/l	21 d	Daphnia magna	
	Acute bacteria toxicity	(2900 mg/l)			Pseudomonas putida	

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
67-64-1	Aceton; 2-Propanon; Propanon			
	Biodegradation	91%	28	
	Readily biodegradable (according to OECD criteria).			
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol			
	Biodegradation	95%	21	
	Readily biodegradable (according to OECD criteria).			
141-78-6	Ethylacetat			
	Biodegradation	79%	20	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,89
67-64-1	Aceton; 2-Propanon; Propanon	-0,24
67-63-0	propan-2-ol; isopropyl alcohol; isopropanol	0,05
141-78-6	Ethylacetat	0,6

BCF

CAS No	Chemical name	BCF	Species	Source
67-64-1	Aceton; 2-Propanon; Propanon	3		ECHA
141-78-6	Ethylacetat	30	Leuciscus idus melanotus	ECHA

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

Waste disposal number of waste from residues/unused products

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160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances
Classified as hazardous waste.

Contaminated packaging

Completely emptied packages can be recycled.

SECTION 14: Transport information


Land transport (ADR/RID)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1

Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)

E0

Inland waterways transport (ADN)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1

Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L

Other applicable information (inland waterways transport)

E0

Marine transport (IMDG)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1

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Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: 1000 mL
EmS: F-D, S-U

Other applicable information (marine transport)
E0

Air transport (ICAO)

14.1. UN number: UN 1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)
E0
Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Flammable gases.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

2010/75/EU (VOC): 94,467 % (614,038 g/l)
2004/42/EC (VOC): 94,467 % (614,038 g/l)

Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC , 2008/47/EC

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).



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Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 1,4,7,8,9,15.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route
(European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H280	Contains gas under pressure; may explode if heated.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)