

Safety Data Sheet

haupa®

HAUPA GmbH & Co.KG

according to Regulation (EC) No 1907/2006

Zink-Spray dunkel "HUPzincDark" Aerosol 400ml

Print date: 23.03.2016

Product code: 170150

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

1.1. Product identifier

Zink-Spray dunkel "HUPzincDark" Aerosol 400ml

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

Use of the substance/mixture

Coatings and paints, fillers, putties, thinners

1.3. Details of the supplier of the safety data sheet

Company name:	HAUPA GmbH & Co.KG	
Street:	Königstraße 165-169	
Place:	D-42853 Remscheid	
Telephone:	+49 (2191) 84 18-0	Telefax: +49 (2191) 84 18 840
e-mail:	sales@haupa.com	
Contact person:	Jochen Husli	Telephone: +49 (2191) 84 18-0
e-mail:	jochen.husli@haupa.com	
Internet:	www.haupa.com	
Responsible Department:	Sicherheitsdatenblätter / Datenmanagement	

1.4. Emergency telephone number:

Die Nummer der Gesellschaft ist nur zu Bürozeiten besetzt: +49 (2191) 84 18-0(7:00 - 16:30 Uhr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Aerosol: Aerosol 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Causes skin irritation.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

acetone; propan-2-one; propanone

ethyl acetate

Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified

Signal word:

Danger

Pictograms:



Hazard statements

H222

Extremely flammable aerosol.

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H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

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.
P271	Use only outdoors or in a well-ventilated area.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
EUH208	Contains 2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime. May produce an allergic reaction.

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

2.3. Other hazards

Processing vapours can irritate the respiratory tracts, skin and eyes.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

active substances with propellant

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Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
74-98-6	propane			10 -< 25 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
106-97-8	butane			10 -< 25 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220			
7440-66-6	zinc powder - zinc dust (stabilized)			10 -< 25 %
	231-175-3	030-001-01-9	01-2119467174-37	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
75-28-5	isobutane			10 -< 25 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1; H220			
67-64-1	acetone; propan-2-one; propanone			10 -< 25 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
141-78-6	ethyl acetate			10 -< 25 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified			2,5 -< 10 %
	265-199-0	649-356-00-4	01-2119455851-35	
	Flam. Liq. 3, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H315 H336 H304 H411			
1330-20-7	xylene			2,5 -< 10 %
	215-535-7	601-022-00-9	01-2119486136-34	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H312 H332 H315 H319 H335 H373 H304			
1314-13-2	zinc oxide			< 1 %
	215-222-5	030-013-00-7	01-2119463881-32	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			< 1 %
	919-446-0	649-330-00-2	01-2119458049-33	
	Flam. Liq. 3, STOT SE 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H372 H304 H411 EUH066			
96-29-7	2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime			< 1 %
	202-496-6	616-014-00-0	01-2119539477-28	
	Carc. 2, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1; H351 H312 H318 H317			

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

Further Information

Full text of R-phrases: see section 16.

SECTION 4: First aid measures

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4.1. Description of first aid measures**General information**

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air. Seek medical attention if problems persist.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Caution if victim vomits: Risk of aspiration! Medical treatment necessary.

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

The following symptoms may occur: difficulties of breathing. Headache.

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

Caution if victim vomits: Risk of aspiration! In all cases of doubt, or when symptoms persist, seek medical advice.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO₂). Dry extinguishing powder. Foam.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

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

Additional information

Contaminated fire-fighting water must be collected separately. Co-ordinate fire-fighting measures to the fire surroundings.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

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).

6.4. Reference to other sections

Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Use only in well-ventilated areas. Keep away from sources of ignition. - No smoking. Flammable vapours can accumulate in head space of closed systems.

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Advice on protection against fire and explosion

Take precautionary measures against static discharges. Vapours may 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 in a cool, well-ventilated place.

Advice on storage compatibility

No data available

Further information on storage conditions

Protect against: heat.

7.3. Specific end use(s)

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-64-1	Acetone	500	1210		TWA (8 h)	WEL
		1500	3620		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
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid	650 mmol/mol	urine	Post shift

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
7440-66-6	zinc powder - zinc dust (stabilized)			
Consumer DNEL, long-term		oral	systemic	50 mg/kg bw/day
67-64-1	acetone; propan-2-one; propanone			
Consumer DNEL, long-term		oral	systemic	62 mg/kg bw/day
141-78-6	ethyl acetate			
Consumer DNEL, long-term		oral	systemic	4,5 mg/kg bw/day
1330-20-7	xylene			
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
64742-82-1	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day

PNEC values

CAS No	Substance	Value
7440-66-6	zinc powder - zinc dust (stabilized)	
Environmental compartment		
Freshwater sediment		118 mg/kg
67-64-1	acetone; propan-2-one; propanone	
Air		21 mg/l
141-78-6	ethyl acetate	
Freshwater		0,26 mg/l
1330-20-7	xylene	
Air		0,327 mg/l

8.2. Exposure controls**Appropriate engineering controls**

Do not eat, drink, smoke or sneeze at the workplace.

Protective and hygiene measures

Work in well-ventilated zones or use proper respiratory protection.

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Protect skin by using skin protective cream.

Hand protection: NBR (Nitrile rubber).

Thickness of glove material: 0,4 mm

penetration time (maximum wearing period): > 30 min

Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

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Environmental exposure controls

Further informations concerning special risk management measures: see annex of this safety data sheet (exposure scenarios).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Aerosol
Colour: grey
Odour: like: hydrocarbons, aromatic.

Test method

Changes in the physical state

Lower explosion limits:	1,5 vol. %
Upper explosion limits:	10,9 vol. %
Ignition temperature:	260 °C
Vapour pressure: (at 20 °C)	4200 hPa
Density (at 20 °C):	1,1 g/cm ³
Solvent content:	73,79

9.2. Other information

Solid content: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

Violent reaction with: Acid, concentrated. Alkalis (alkalis), concentrated. Oxidizing agents, strong.

10.4. Conditions to avoid

Ignition hazard.

10.5. Incompatible materials

Oxidizing agents, strong.

10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

Further information

Danger of bursting container. >50°C

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

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

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CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
106-97-8	butane				
	inhalative (4 h) gas	LC50	658 ppm	Rat	GESTIS
67-64-1	acetone; propan-2-one; propanone				
	oral	LD50	5800 mg/kg	Rat	RTECS
	dermal	LD50	20000 mg/kg	Rabbit	IUCLID
	inhalative (4 h) vapour	LC50	76 mg/l	Rat	
141-78-6	ethyl acetate				
	oral	LD50	5620 mg/kg	Rabbit	
	dermal	LD50	> 18000 mg/kg	Rabbit	
	inhalative (4 h) aerosol	LC50	56 mg/l	Rat	
64742-95-6	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified				
	oral	LD50	> 2000 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rat	
1330-20-7	xylene				
	oral	LD50	8700 mg/kg	Rat	
	dermal	LD50	2000 mg/kg	Rat	
	inhalative vapour	ATE	11 mg/l		
	inhalative (4 h) aerosol	LC50	10 - 20 mg/l	Rat	
1314-13-2	zinc oxide				
	oral	LD50	> 5000 mg/kg	Rat	IUCLID
96-29-7	2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime				
	dermal	ATE	1100 mg/kg		

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

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

STOT-single exposure

May cause drowsiness or dizziness. (acetone; propan-2-one; propanone), (ethyl acetate), (Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified), (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Severe effects after repeated or prolonged exposure

Repeated exposure may cause skin dryness or cracking.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Aspiration hazard

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

SECTION 12: Ecological information**12.1. Toxicity**

Leakage into the environment must be prevented.

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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
67-64-1	acetone; propan-2-one; propanone					
	Acute fish toxicity	LC50	5540 mg/l	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50	6100 mg/l	48 h	Daphnia magna	
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50	230 mg/l	96 h	Onchorhynchus mykiss (Rainbow trout)	
	Acute crustacea toxicity	EC50	717 mg/l	48 h	Daphnia magna (Big water flea)	
	Algae toxicity	NOEC	> 100 mg/l	3 d	Desmodesmus subspicatus.	OECD 201
	Crustacea toxicity	NOEC	2,4 mg/l	21 d	Daphnia magna (Big water flea)	DIN 38412 / part 11
1330-20-7	xylene					
	Acute fish toxicity	LC50	86 mg/l	96 h	Leuciscus idus (golden orfe)	
	Acute algae toxicity	ErC50	1 - 10 mg/l	72 h		
	Acute crustacea toxicity	EC50	1 - 10 mg/l	48 h		
96-29-7	2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime					
	Acute crustacea toxicity	EC50	750 mg/l	48 h	Daphnia magna	

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
74-98-6	propane	2,36
106-97-8	butane	2,89
75-28-5	isobutane	2,8
67-64-1	acetone; propan-2-one; propanone	-0,24
96-29-7	2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime	0,63

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

Highly toxic for Fish.

Further information

Doesn't get into the sewage water as long as the process is carried out according to regulations.
hazardous to water (WGK 2)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Consult the appropriate authorities about waste disposal. Dispose of waste according to applicable legislation.

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Waste disposal number of waste from residues/unused products

- 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.

Waste disposal number of used product

- 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.

Waste disposal number of contaminated packaging

- 150104 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); metallic packaging

Contaminated packaging

Consult the appropriate authorities about waste disposal. Dispose of waste according to applicable legislation.

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)

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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




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
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: yes



Danger releasing substance: zinc powder - zinc dust (stabilized)

14.6. Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No data available

Other applicable information

Transport as "limited quantity" according to chapter 3.4 ADR/RID.

SECTION 15: Regulatory information

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

EU regulatory information

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2004/42/EC (VOC):

VOC-value (in g/L): 620,3

Volatile organic compounds (VOC) content in percent by weight: 73,79

National regulatory information

Water contaminating class (D):

2 - water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains 2-butanone oxime, ethyl methyl ketone oxime, ethyl methyl ketoxime. May produce an allergic reaction.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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