

Safety Data Sheet

haupa®

HAUPA GmbH & Co.KG

according to Regulation (EC) No 1907/2006

Zink-Spray 550 "HUPzincKorro" Aerosol 400ml

Print date: 10.10.2016

Product code: 170153

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

1.1. Product identifier

Zink-Spray 550 "HUPzincKorro" Aerosol 400ml

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

Use of the substance/mixture

Metal surface treatment products, including galvanic and electroplating products
Coatings and paints, thinners, paint removers

Uses advised against

No data available

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

Naphtha, Hydrocarbons, C9, aromatics

Signal word: Danger

Pictograms:



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Hazard statements

H222	Extremely flammable aerosol.
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.

Additional advice on labelling

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

2.3. Other hazards

Wear suitable protective clothing, gloves and eye/face protection.

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture related information

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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 - < 20 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
67-64-1	acetone; propan-2-one; propanone			10 - < 20 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
7440-66-6	zinc powder - zinc dust (stabilized)			10 - < 20 %
	231-175-3	030-001-01-9	01-2119467174-37	
	Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H400 H410			
75-28-5	isobutane			10 - < 20 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1; H220			
1330-20-7	xylene			10 - < 20 %
	215-535-7	601-022-00-9	01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H312 H332 H315			
	Naphtha, Hydrocarbons, C9, aromatics			5 - < 10 %
	918-668-5		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411 EUH066			
106-97-8	butane			2,5 - < 5 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220			
100-41-4	ethylbenzene			1 - < 2,5 %
	202-849-4	601-023-00-4	02-2119752523-40	
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304			

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

SECTION 4: First aid measures

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.

Remove casualty to fresh air and keep warm and at rest.

After contact with skin

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

Remove contaminated clothing immediately and dispose off safely.

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.

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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. Drowsiness Dizziness. Coughing. Nausea

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. Subsequent observance for pneumonia and lung oedema.

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. Wear personal protection equipment. Keep away from unprotected people. Keep upwind.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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). Ventilate affected area.

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.

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.

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Advice on storage compatibility

No data available

Further information on storage conditions

Protect against: heat.

7.3. Specific end use(s)

After use replace the closing cap immediately. Observe instructions for use.

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
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		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

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
67-64-1	acetone; propan-2-one; propanone			
	Consumer DNEL, long-term	oral	systemic	62 mg/kg bw/day
7440-66-6	zinc powder - zinc dust (stabilized)			
	Consumer DNEL, long-term	oral	systemic	50 mg/kg bw/day
1330-20-7	xylene			
	Consumer DNEL, long-term	oral	systemic	1,6 mg/kg bw/day

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PNEC values

CAS No	Substance	Value
67-64-1	acetone; propan-2-one; propanone	
	Freshwater	10,6 mg/l
7440-66-6	zinc powder - zinc dust (stabilized)	
	Freshwater sediment	118 mg/kg
1330-20-7	xylene	
	Freshwater	0,327 mg/l

8.2. Exposure controls

Protective and hygiene measures

Work in well-ventilated zones or use proper respiratory protection. Do not eat, drink, smoke or sneeze at the workplace.

Eye/face protection

Tightly sealed safety glasses. DIN EN 166

Hand protection

Protect skin by using skin protective cream.

Hand protection: Butyl rubber. DIN EN 374

Thickness of glove material: 0,7 mm

penetration time (maximum wearing period): > 60 min

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). DIN EN 13034

Respiratory protection

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

Environmental exposure controls

No data available

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

pH-Value: Not applicable, aerosol

Changes in the physical state

Melting point: Not applicable, aerosol

Initial boiling point and boiling range: Not applicable, aerosol

Flash point: Not applicable, aerosol

Explosive properties

not Explosive.

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

Lower explosion limits:

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Upper explosion limits:

Ignition temperature: > 200 °C

Density (at 20 °C): 0,93 g/cm³

Solvent content: 67%

9.2. Other information

Solid content: 10 - < 20%

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

Thermal decomposition can lead to the escape of irritating gases and vapors. Carbon dioxide. Carbon monoxide.

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 route	Method	Dose	Species	Source
74-98-6	propane				
	inhalative (4 h) aerosol	LC50	20 mg/l	Rat	
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	
75-28-5	isobutane				
	inhalative (4 h) aerosol	LC50	> 50 mg/l	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	
	Naphtha, Hydrocarbons, C9, aromatics				
	oral	LD50	> 6800 mg/kg	Rat	
	dermal	LD50	> 2000 mg/kg	Rabbit	
106-97-8	butane				
	inhalative (4 h) gas	LC50	658 ppm	Rat	GESTIS
100-41-4	ethylbenzene				
	oral	LD50	3500 mg/kg	Rat	GESTIS
	dermal	LD50	15400 mg/kg	Rabbit	GESTIS
	inhalative (4 h) vapour	LC50	17,2 mg/l	Rat	
	inhalative aerosol	ATE	1,5 mg/l		

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)

Severe effects after repeated or prolonged exposure

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

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	
7440-66-6	zinc powder - zinc dust (stabilized)					
	Acute fish toxicity	LC50	0,41 mg/l	96 h	Onchorhynchus mykiss (Rainbow trout)	
	Acute algae toxicity	ErC50	0,527 mg/l	96 h	Algae	
	Acute crustacea toxicity	EC50	0,354 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC	0,0083 mg/l	30 d	Cyprinus carpio (Common Carp)	
	Algae toxicity	NOEC	9 mg/l	3 d	Ceratophyllum demersum	
	Crustacea toxicity	NOEC	0,178 mg/l	21 d	Crustaceen-Palaemon elegans)	
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		
	Naphtha, Hydrocarbons, C9, aromatics					
	Acute fish toxicity	LC50	1 - 10 mg/l	96 h	Daphnia magna	
100-41-4	ethylbenzene					
	Acute algae toxicity	ErC50	3,6 mg/l	96 h		GESTIS

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

Very toxic to aquatic organisms.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
74-98-6	propane	2,36
67-64-1	acetone; propan-2-one; propanone	-0,24
75-28-5	isobutane	2,8
106-97-8	butane	2,89
100-41-4	ethylbenzene	3,15

12.4. Mobility in soil

If product enters soil, it will be mobile and may contaminate groundwater.

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

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13.1. Waste treatment methods
Advice on disposal

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

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
 Excepted quantity: E0
 Transport category: 2
 Tunnel restriction code: D

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
 Excepted quantity: E0

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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



Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

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
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203
IATA-max. quantity - Passenger:	75 kg
IATA-packing instructions - Cargo:	203
IATA-max. quantity - Cargo:	150 kg

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 Marpol 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): 623

Volatile organic compounds (VOC) content in percent by weight: 67

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.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.

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 receiver of our product is singularly responsible for adhering to existing laws and regulations.

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