

Safety Data Sheet

haupa®

HAUPA GmbH & Co.KG

according to Regulation (EC) No 1907/2006

Markierungsspray "HUPmark" leuchtrot,gelb,pink Aerosol 500ml

Print date: 23.03.2016

Product code: 170140,141,142

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

1.1. Product identifier

Markierungsspray "HUPmark" leuchtrot,gelb,pink Aerosol 500ml

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

Use of the substance/mixture

Coatings and paints, thinners, paint removers

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

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

n-butyl acetate

acetone; propan-2-one; propanone

ethyl acetate

Signal word:

Danger

Pictograms:



Hazard statements

H222

Extremely flammable aerosol.

H229

Pressurised container: May burst if heated.

H319

Causes serious eye irritation.

H336

May cause drowsiness or dizziness.

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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.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- 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.
74,0 % by mass of the contents are flammable.

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

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			15 -< 30 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1; H220			
123-86-4	n-butyl acetate			15 -< 30 %
	204-658-1	607-025-00-1	01-2119485493-29	
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			
67-64-1	acetone; propan-2-one; propanone			15 -< 20 %
	200-662-2	606-001-00-8	01-2119471330-49	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
74-98-6	propane			5 -< 15 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1; H220			
141-78-6	ethyl acetate			1 -< 5 %
	205-500-4	607-022-00-5	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.

Further Information

Full text of R-phrases: 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.

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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

In all cases of doubt, or when symptoms persist, seek medical advice.

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

Caution if victim vomits: Risk of aspiration!

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.

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

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Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Further information on storage conditions

Protect against: heat. UV-radiation/sunlight.

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
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	-		TWA (8 h)	WEL
		400	-		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
123-86-4	n-butyl acetate			
	Consumer DNEL, long-term	dermal	systemic	3,4 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

PNEC values

CAS No	Substance	Value
	Environmental compartment	
123-86-4	n-butyl acetate	
	Micro-organisms in sewage treatment plants (STP)	35,6 mg/l
67-64-1	acetone; propan-2-one; propanone	
	Air	21 mg/l
141-78-6	ethyl acetate	
	Freshwater	0,26 mg/l

8.2. Exposure controls

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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.

Hand protection

Protect skin by using skin protective cream.

Hand protection: NBR (Nitrile rubber).

penetration time (maximum wearing period): 60min

Skin protection

Body protection: not required.

Respiratory protection

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

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties

Physical state:	Aerosol
Colour:	various
Odour:	characteristic

Test method**Changes in the physical state**

Lower explosion limits:	1,5 vol. %
Upper explosion limits:	13 vol. %
Ignition temperature:	490 °C
Density (at 20 °C):	ca. 0,7 g/cm ³
Solvent content:	62,5

9.2. Other information

Solid content:	No data available
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SECTION 10: Stability and reactivity
10.1. Reactivity

No data available

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Ignition hazard.

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

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

Further information

Danger of bursting container. >50°C

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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 routes	Method	Dose	Species	Source
106-97-8	butane				
	inhalative (4 h) gas	LC50	658 ppm	Rat	GESTIS
123-86-4	n-butyl acetate				
	oral	LD50	> 8800 mg/kg	Rat	
	dermal	LD50	> 5000 mg/kg	Rabbit	
	inhalative (4 h) aerosol	LC50	> 21 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	
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	

Irritation and corrosivity

Causes serious eye irritation.

Sensitising effects

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

STOT-single exposure

May cause drowsiness or dizziness. (n-butyl acetate), (acetone; propan-2-one; propanone), (ethyl acetate)

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

There are no data available on the mixture itself.

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CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50	62 mg/l	96 h	Brachydanio rerio (zebra-fish)	
	Acute algae toxicity	ErC50	675 mg/l	72 h	Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50	44 mg/l	48 h	Daphnia magna	
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	Oncorhynchus 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

12.2. Persistence and degradability

No data available

CAS No	Chemical name				
	Method	Value	d	Source	
	Evaluation				
123-86-4	n-butyl acetate				
	DOC reduction.	> 70		OECD 301E/ EEC 92/69/V, C.4-B	

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
106-97-8	butane	2,89
67-64-1	acetone; propan-2-one; propanone	-0,24
74-98-6	propane	2,36

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Other adverse effects

No data available

Further information

Doesn't get into the sewage water as long as the process is carried out according to regulations.
slightly hazardous to water (WGK 1)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Advice on 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

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

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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



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: no

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): 650

Volatile organic compounds (VOC) content in percent by weight: 62,5

National regulatory information

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

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.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)