

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Impulse für Mensch und Umwelt

XD056-B60 hebro®sol 86-119

Version: 1.11

Revision Date 13.08.2013

Print Date 18.09.2013

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

1.1 Product identifier

Trade name : XD056-B60 hebro®sol 86-119

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

Use of the Sub-stance/Mixture : Cleaner (solvent) for professional application in industry and trade

1.3 Details of the supplier of the safety data sheet

Company : hebro chemie GmbH
Rostocker Str. 40
41199 Mönchengladbach

Contact person : Wolfgang Schaffers
Telephone : +49 (0) 2166 6009-0
Telefax : +49 (0) 2166 6009-99

Contact person product safety : Abteilung Produktsicherheit
E-mail address : info-produktsicherheit@gmx.de

1.4 Emergency telephone number

: Giftinformationszentrum Erfurt:
+49 (0) 361 730 730

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)

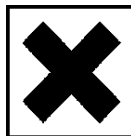
Toxic to Reproduction Category 3
Irritant

R63: Possible risk of harm to the unborn child.
R41: Risk of serious damage to eyes.

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)

Hazard pictograms :



Harmful

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R-pharse(s) : R41 Risk of serious damage to eyes.
R63 Possible risk of harm to the unborn child.

S-pharse(s) : S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S60 This material and its container must be disposed of as hazardous waste.

Hazardous components which must be listed on the label:

- 2687-91-4 1-Ethylpyrrolidin-2-one

2.3 Other hazards

The information required is contained in this Material Safety Data Sheet.

SECTION 3: Composition/information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

Chemical nature : Mixture of heterocyclic nitrogen compounds with glycol ether

Hazardous components

Chemical Name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
1-Ethylpyrrolidin-2-one	2687-91-4 220-250-6 01-2119472138-36	Xi; R41 Repr.Cat.3; R63	Eye Dam. 1; H318 Repr. 2; H361d	>= 80 - <= 100

WEL substance :

1-Methoxy-2-propanol	107-98-2 203-539-1 01-2119457435-35	R10 R67	Flam. Liq. 3; H226 STOT SE 3; H336	>= 2.5 - < 10
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For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-Statements mentioned in this Section, see Section 16.
For the full text of the Notas mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : When symptoms persist or in all cases of doubt seek medical advice.
- If inhaled : Provide fresh air.
Keep patient warm and at rest.
If symptoms persist, call a physician.
- In case of skin contact : Take off all contaminated clothing immediately.
After contact with skin, wash immediately with plenty of soap and water.
- In case of eye contact : Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.
Seek medical advice.
- If swallowed : Call a physician immediately.
Keep at rest.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : Erythema

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
For specialist advice physicians should contact the Poisons Information Service.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry powder
Water spray jet
- Unsuitable extinguishing media : High volume water jet

5.2 Special hazards arising from the substance or mixture

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Specific hazards during fire-fighting : Hazardous decomposition products formed under fire conditions.
Carbon monoxide
nitrogen oxides (NOx)

5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self contained breathing apparatus for fire fighting if necessary.

Further information : Use water spray to cool unopened containers.
Suppress (knock down) gases/vapours/mists with a water spray jet.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Ensure adequate ventilation.
Do not breathe vapours, aerosols.
Remove all sources of ignition.

6.2 Environmental precautions

Environmental precautions : Do not empty into drains.
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

See chapter 8 and 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Keep away from open flames, hot surfaces and sources of ignition.
Take precautionary measures against static discharges.
Avoid contact with skin and eyes.

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Do not breathe vapours or spray mist.
When using do not eat, drink or smoke.
For personal protection see section 8.

Advice on protection against fire and explosion : Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Follow the water regulations.
Keep only in the original container in a cool, well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Further information on storage conditions : Keep only in the original container in a cool, well-ventilated place.
Keep away from heat.
Keep away from sources of ignition - No smoking.
Keep at temperatures between - 7°C and 40°C.

Advice on common storage : Incompatible with oxidizing agents.

7.3 Specific end uses

Specific use(s) : Cleaner (solvent) for professional application in industry and trade

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components	CAS-No.	Value	Control parameters	Update	Basis
1-Methoxy-2-propanol	107-98-2	TWA	100 ppm 375 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skin Indicative			
	107-98-2	STEL	150 ppm 568 mg/m ³	2000-06-16	2000/39/EC
Further information	:	skin: Identifies the possibility of significant uptake through the skin Indicative			

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	107-98-2	TWA	100 ppm 375 mg/m3	2005-04-06	GB EH40
Further information	: Sk: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.				
	107-98-2	STEL	150 ppm 560 mg/m3	2005-04-06	GB EH40
Further information	: Sk: Can be absorbed through skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.				

DNEL/DMEL

1-Ethylpyrrolidin-2-one : End Use: DNEL, Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term systemic effects
 Value: 40 mg/m3

End Use: DNEL, Industrial use, Workers
 Exposure routes: Skin contact
 Potential health effects: Systemic effects
 Value: 8 mg/kg

End Use: DNEL, Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term local effects
 Value: 40 mg/m3

1-Methoxy-2-propanol : End Use: DNEL, Industrial use, Workers
 Exposure routes: Inhalation
 Potential health effects: Acute local effects
 Value: 553.5 mg/m3

End Use: DNEL, Industrial use, Workers
 Exposure routes: Inhalation
 Potential health effects: Long-term systemic effects
 Value: 369 mg/m3

End Use: DNEL, Industrial use, Workers
 Exposure routes: Skin contact
 Potential health effects: Long-term systemic effects
 Value: 50.6 mg/kg

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PNEC

1-Ethylpyrrolidin-2-one

: Fresh water
Value: 0.25 mg/l

Marine water
Value: 0.025 mg/l

Fresh water sediment
Value: 1.91 mg/kg

Soil
Value: 0.235 mg/kg

Behaviour in waste water treatment plants
Value: 10 mg/l

1-Methoxy-2-propanol

: Fresh water
Value: 10 mg/l

Behaviour in waste water treatment plants
Value: 100 mg/l

Fresh water sediment
Value: 41.6 mg/kg

Marine sediment
Value: 4.17 mg/kg

Soil
Value: 2.47 mg/kg

8.2 Exposure controls

Engineering measures

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Respiratory protection : When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Recommended Filter type:

ABEK-filter

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection : Chemical resistant gloves made of butyl rubber or nitrile rub-

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ber category III according to EN 374.

Eye protection : Safety glasses with side-shields

Skin and body protection : Protective suit

Protective measures : Follow the skin protection plan.

Environmental exposure controls

General advice : Do not empty into drains.
Inform the relevant authorities if it enters sewers, aquatic environment or soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : alcohol-like

Flash point : 91 °C

Ignition temperature : 250 °C

Lower explosion limit : 1.3 %(V)

Upper explosion limit : 13.1 %(V)

pH : 7
at 100 g/l
20 °C

Boiling point/boiling range : 135 °C

Vapour pressure : <1 hPa
at 20 °C
Information taken from reference works and the literature.

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Density : 1.06 g/cm³
at 20 °C

Water solubility : completely soluble

9.2 Other information

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

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Product is stable under appropriate usage.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products : Carbon dioxide (CO₂), carbon monoxide (CO), oxides of nitrogen (NO_x), dense black smoke.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity
1-Ethylpyrrolidin-2-one : LD50: ca. 3,200 mg/kg
Species: rat
Method: OECD Test Guideline 401

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Acute inhalation toxicity

1-Ethylpyrrolidin-2-one : LC50: > 5.1 mg/l
Exposure time: 4 h
Species: rat
Method: OECD Test Guideline 403

Acute dermal toxicity

1-Ethylpyrrolidin-2-one : LD50: > 2,000 mg/kg
Species: rat
Method: OECD Test Guideline 402

Skin corrosion/irritation

Skin irritation : Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Serious eye damage/eye irritation

Eye irritation : The liquid splashed in the eyes may cause irritation and reversible damage.

Respiratory or skin sensitisation

Sensitisation : This information is not available.

Carcinogenicity

Remarks : Not classifiable as a human carcinogen.

Teratogenicity

Remarks
1-Ethylpyrrolidin-2-one : Suspected of damaging the unborn child.

Further information

: According to many years of experience, there are no known harmful effects when handled properly. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

SECTION 12: Ecological information

12.1 Toxicity

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Toxicity to fish : no data available

Toxicity to fish
1-Ethylpyrrolidin-2-one : static test LC50: > 464 - < 999 mg/l
Exposure time: 96 h
Species: Brachydanio rerio (Zebra danio)
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates
1-Ethylpyrrolidin-2-one : static test EC50: > 104 mg/l
Exposure time: 48 h
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 202

semi-static test NOEC: 12.5 mg/l
Exposure time: 21 d
Species: Daphnia magna (Water flea)
Method: OECD Test Guideline 211

Toxicity to algae
1-Ethylpyrrolidin-2-one : static test EC50: > 101 mg/l
Exposure time: 72 h
Species: Desmodesmus subspicatus (green algae)
Method: OECD Test Guideline 201

Toxicity to bacteria
1-Ethylpyrrolidin-2-one : EC50: > 1,000 mg/l
Exposure time: 16 h
Species: Pseudomonas putida

12.2 Persistence and degradability

Biodegradability : no data available

12.3 Bioaccumulative potential

Bioaccumulation : no data available

12.4 Mobility in soil

Mobility : no data available

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12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

Chemical Oxygen Demand (COD)

1-Ethylpyrrolidin-2-one : 2,110 mg/g

Additional ecological information : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.
Do not let product enter drains.
Do not dispose of with domestic refuse.

Packaging : Do not dispose of with domestic refuse.

Contaminated packaging : Dispose of in accordance with local regulations.

Waste Code : 140603 other solvents and solvent mixtures

SECTION 14: Transport information

ADR

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

RID

Not dangerous goods

SECTION 15: Regulatory information

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

Water contaminating class : WGK 1 slightly water endangering

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(Germany)

VWVWS A4

Other regulations

: The product is classified and labelled in accordance with EC directives or respective national laws. Regional or national implementations of GHS may not implement all hazard classes and categories.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3

R10	Flammable.
R41	Risk of serious damage to eyes.
R63	Possible risk of harm to the unborn child.
R67	Vapours may cause drowsiness and dizziness.

Full text of H-Statements referred to under sections 2 and 3.

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.