Safety data sheet in accordance with 1907/2006/EC

Trade name: HeBoCoat® SL-E 125
Current version : 4.1.0, issued: 25.03.2025 **Replaced version:** 4.0.1, issued: 02.08.2024 **Region:** GB

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

1.1 Product identifier

Trade name

HeBoCoat® SL-E 125

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

Relevant identified uses of the substance or mixture
Industrial use:
High temperature range
Anticaking agent

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
Henze Boron Nitride Products AG
Grundweg 1
87493 Lauben

Telephone no. +49/(0) 8374 58997-0
Fax no. +49/(0) 8374 58997-99
e-mail info@henze-bnp.de;

Information provided by / telephone
+49/(0) 8374 58997-0. Mo-Thr. 8:00-16:30. Fr. 8:00-15:00

Advice on Safety Data Sheet
info@henze-bnp.de

1.4 Emergency telephone number

+49/(0)89-19240 (Departmant of toxicology, University of Munich). 24 h/7 days

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Aerosol 1; H222 - H229
Eye Irrit. 2; H319

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.
According to Regulation (EC) 1272/2008 Annex I section 1.1.3.7. the mixture has been classified with respect to its hazards to human health as the non-aerosol form of the mixture, because the added propellant gas does not affect the hazardous properties of the mixture upon spraying.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms


GHS02


GHS07

Signal word

Danger

Hazard statement(s)

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.

Precautionary statement(s)

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.
P410+P412	Protect from sunlight. Do no expose to temperatures exceeding 50°C/122°F.

2.3 Other hazards

This product does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

PBT assessment
The product is not considered to be a PBT.

vPvB assessment
The product is not considered to be a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization
Aerosol; Mixture of Boron Nitride powder, ethanol and additives. The aerosol is composed of 35 % liquid phase (hazardous ingredients) and 65 % propellant gas mixture (other ingredients).

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**ethanol**			
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 70.00 - < 90.00	wt%

Full text of H- and EUH-phrases, if not already mentioned in section 2.2: see section 16.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Eye Irrit. 2; H319: C >= 50%	-	-

Additional ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**butane**			
	106-97-8 203-448-7 601-004-00-0 01-2119474691-32	Flam. Gas 1A; H220 Press. Gas liq.; H280	>= 25.00 - < 50.00	wt%
2	**propane**			
	74-98-6 200-827-9 601-003-00-5 01-2119486944-21	Flam. Gas 1A; H220 Press. Gas compr.; H280	>= 25.00 - < 50.00	wt%
3	**isobutane**			

	75-28-5 200-857-2 601-004-00-0 01-2119485395-27	Flam. Gas 1A; H220 Press. Gas compr.; H280	>= 25.00 - < 50.00	wt%
4	**2-methylbutane**			
	78-78-4 201-142-8 601-085-00-2 01-2119475602-38	Aquatic Chronic 2; H411 Asp. Tox. 1; H304 EUH066 Flam. Liq. 1; H224 STOT SE 3; H336	< 2.00	wt%
5	**ethane**			
	74-84-0 200-814-8 601-002-00-X 01-2119486765-21	Flam. Gas 1A; H220 Press. Gas liq.; H280	< 2.00	wt%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove contaminated clothing and shoes and launder thoroughly before reusing.

After inhalation
Remove to fresh air, keep patient warm and at rest. In the event of symptoms take medical treatment.

After skin contact
When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

After eye contact
Remove contact lenses, irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart and seek medical advice.

After ingestion
Rinse the mouth thoroughly with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam; Extinguishing powder; Carbon dioxide; Water spray jet

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In the event of fire, the following can be released: Carbon monoxide and carbon dioxide

5.3 Advice for firefighters
Use self-contained breathing apparatus. Cool endangered containers with water in case of fire. Suppress gases/vapours/mists with water spray jet. Wear protective clothing. Heat causes increase in pressure and risk of bursting. Vapours can form an explosive mixture with air.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Keep away from ignition sources.

For emergency responders
No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions
Do not allow to enter drains or waterways.

6.3 Methods and material for containment and cleaning up
Pick up with absorbent material. Flush away residues with water. Use chemical neutralising agents.

6.4 Reference to other sections
No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances. Do not breathe steams or mist of the product.

General protective and hygiene measures
Do not eat or drink during work - no smoking. Wash hands and skin before breaks and after work. Before beginning work use a water resistant skin protection lotion. Do not inhale vapours. Provide eye wash fountain in work area.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition. Use explosion-proof equipment/fittings and non-sparking tools.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed.

Recommended storage temperature

Value	15	-	25	°C

7.3 Specific end use(s)

Industry solution
Always read product information before use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.		EC no.	
1	**ethanol**	**64-17-5**		**200-578-6**	
	List of approved workplace exposure limits (WELs) / EH40				
	Ethanol				
	WEL long-term (8-hr TWA reference period)	1920	mg/m³	1000	ppm
2	**butane**	**106-97-8**		**203-448-7**	
	List of approved workplace exposure limits (WELs) / EH40				
	Butane				
	WEL short-term (15 min reference period)	1810	mg/m³	750	ppm
	WEL long-term (8-hr TWA reference period)	1450	mg/m³	600	ppm
	Comments	Carc, (only applies if Butane contains more than 0.1% of buta-1,3-diene)			
3	**2-methylbutane**	**78-78-4**		**201-142-8**	
	2006/15/EC				
	Isopentane				
	WEL long-term (8-hr TWA reference period)	3000	mg/m³	1000	ppm
	List of approved workplace exposure limits (WELs) / EH40				
	Isopentane				

	WEL long-term (8-hr TWA reference period)	1800	mg/m³	600	ppm

DNEL, DMEL and PNEC values

DNEL values (worker)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**ethanol**			**64-17-5** **200-578-6**	
	dermal	Long term (chronic)	systemic	8238	mg/kg/day
	inhalative	Long term (chronic)	systemic	380	mg/m³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	**ethanol**			**64-17-5** **200-578-6**	
	inhalative	Long term (chronic)	systemic	114	mg/m³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	**ethanol**		**64-17-5** **200-578-6**	
	water	fresh water	0.96	mg/L
	water	marine water	0.79	mg/L
	water	fresh water sediment	3.6	mg/kg dry weight
	water	marine water sediment	2.9	mg/L
	soil	-	0.63	mg/kg dry weight
	sewage treatment plant	-	580	mg/L
	secondary poisoning	-	0.38	g/kg
	with reference to: food			

8.2 Exposure controls

Appropriate engineering controls
Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment

Respiratory protection
If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. Breathing apparatus in the event of aerosol or mist formation.
Respirator AXP

Eye / face protection
Safety glasses with side protection shield (EN 166)

Hand protection
Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material	butyl rubber		
Material thickness	>=	0.5	mm
Breakthrough time	>	240	min

Other
Normal chemical work clothing.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
liquid

Form
Aerosol

Colour
white

Odour
ethanol

pH value	
reason for missing pH	substance/mixture is non-polar/aprotic

Boiling point / boiling range			
Value		56	°C

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point			
Value		-20	°C

Ignition temperature			
Value		425	°C

Flammability
No data available

Lower explosion limit			
Value		2.6	% vol

Upper explosion limit			
Value		12.8	% vol

Vapour pressure			
Value		246	mbar
Reference temperature		20	°C
Value		815	mbar
Reference temperature		50	°C

Relative vapour density			
Value		1.03	
Reference temperature		20	°C

Relative density
No data available

Density				
Value	0.86	-	0.89	g/cm³
Reference temperature			20	°C

Solubility
No data available

Partition coefficient n-octanol/water (log value)

No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6

log Pow	-0.35	
Reference temperature	24	°C
with reference to	pH 7,4	
Method	OECD 107	
Source	ECHA	

Kinematic viscosity
No data available

Solvent content			
Value	>	70	%

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Dangerous reactions are not expected if the product is handled according to its intended use.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Posibility of explosion when heated in confinement.

10.4 Conditions to avoid
No data available.

10.5 Incompatible materials
Plastics, rubber

10.6 Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

LD50	10470	mg/kg bodyweight
Species	rat	
with reference to	95% ethanol in water	
Method	OECD 401	
Source	ECHA	
Evaluation/classification	Based on available data, the classification criteria are not met.	

Acute dermal toxicity
No data available

Acute inhalational toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**

LC50	124.7	mg/l
Duration of exposure	4	h
State of aggregation	Vapour	

Species	rat
Method	OECD 403
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

Skin corrosion/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species		rabbit	
Method		OECD 404	
Source		ECHA	
Evaluation		non-irritant	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Serious eye damage/irritation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Species		rabbit	
Method		OECD 405	
Source		ECHA	
Evaluation		irritant	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Respiratory or skin sensitisation			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure		respiratory tract	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Route of exposure		Skin	
Species		mouse	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Germ cell mutagenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Type of examination		in vitro gene mutation study in bacteria	
Species		Salmonella typhimurium	
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		in vitro gene mutation study in mammalian cells	
Species		mouse lymphoma cells	
Method		OECD 476	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
Type of examination		Genotoxicity in vivo	
Species		mouse	
Method		OECD 478	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure		oral	
NOAEL			
Type of examination		2 generation study	
Species		mouse	
Method		OECD 416	

Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		
Route of exposure	inhalational		
NOAEL	>=	20000	ppm
Type of examination	Prenatal Developmental Toxicity Study		
Species	rat		
Method	OECD 414		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

STOT - single exposure
No data available

STOT - repeated exposure			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Route of exposure	oral		
Duration of exposure	14		week/s
Species	rat		
Target organ	kidneys		
Method	OECD 408		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard
No data available

Endocrine disrupting properties
No data available

11.2 Information on other hazards

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
LC50	14200		mg/l
Duration of exposure	96		h
Species	Pimephales promelas		
Method	EPA		
Source	ECHA		

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
EC50	5012		mg/l
Duration of exposure	48		h
Species	Ceriodaphnia dubia		
Method	ASTM Standard E 729-80		

Source	ECHA

Toxicity to Daphnia (chronic)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
NOEC		9.6	mg/l
Duration of exposure		9	day(s)
Species	Daphnia magna		
Source	ECHA		

Toxicity to algae (acute)			
Product Name			
HeBoCoat® SL-E 125			
ErC50			mg/l
Duration of exposure		72	h

No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
EC50		275	mg/l
Duration of exposure		72	h
Species	Chlorella vulgaris		
Method	OECD 201		
Source	ECHA		

Toxicity to algae (chronic)		
Product Name		
HeBoCoat® SL-E 125		
NOEC		mg/l

Bacteria toxicity
No data available

12.2 Persistence and degradability

Biodegradability			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
Type	aerobic biodegradation		
Value	appr.	84	%
Duration		20	day(s)
Source	ECHA		
Evaluation	readily biodegradable		

Behaviour in sewers [waste treatment plants]
In accordance with the actual state of knowledge, adverse effects are not to be expected in sewage treatment plants.

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log value)			
No	**Substance name**	**CAS no.**	**EC no.**
1	**ethanol**	**64-17-5**	**200-578-6**
log Pow		-0.35	
Reference temperature		24	°C
with reference to	pH 7,4		
Method	OECD 107		
Source	ECHA		

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
Product Name	
HeBoCoat® SL-E 125	
PBT assessment	The product is not considered to be a PBT.
vPvB assessment	The product is not considered to be a vPvB.

12.6 Endocrine disrupting properties

Endocrine disrupting properties
Product Name
HeBoCoat® SL-E 125
Our product HeBoCoat® SL-E 125 has no Endocrine disrupting properties.

12.7 Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste code 16 05 04* gases in pressure containers (including halons) containing hazardous substances

The listed waste code numbers, according to the European Waste Catalogue, are to be understood as a recommendation. A final decision must be made in agreement with the regional waste disposal company.

Packaging

Waste code 15 01 04 metallic packaging

Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN1950
IMDG	UN1950
ICAO-TI / IATA	UN1950

14.2 UN proper shipping name

ADR/RID/ADN	AEROSOLS
IMDG	AEROSOLS
ICAO-TI / IATA	Aerosols, flammable

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	2
Label	2.1
Classification code	5F
Tunnel restriction code	D
IMDG - Class	2
Label	2.1
ICAO-TI / IATA - Class	2.1
Label	2.1

14.4 Packing group

ADR/RID/ADN	-
IMDG	-
ICAO-TI / IATA	-

14.5 Environmental hazards

EmS F-D, S-U

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3, 75

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P3a

Other regulations
Adhere to the national sanitary and occupational safety regulations when using this product.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Further information
Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

Sources of key data used to compile the data sheet:
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
National Threshold Limit Values of the corresponding countries as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

H222 - H229	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.

Creation of the safety data sheet
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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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