

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

1.1 Product identifier

Trade name/designation: GEL KH 67
Product-no.: KH 67 Hardener included in product line "GHB Pro", "Abox Pro XT" and "Abox Pro XT SL"

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

Relevant identified uses of the substance or mixture

castable resin

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Company: Günther Spelsberg GmbH & Co.KG
Im Gewerbepark 1
Germany- 58579 Schalksmühle
Telephone: +49 (0) 2355/892-0
Telefax: +49 (0) 2355/892-299
E-Mail: info@spelsberg.de
Dept. responsible for information: Safety and Environmental Management

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

2. Hazards identification:

2.1 Classification of the substance or mixture

Classification information

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

Not relevant

2.3 Other hazards

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > O. 1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > O. 1% of a substance that is considered to be vPvB.

3. Composition / information on ingredients:

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II.

4. First aid measures:

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation

Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact

When in contact with the skin, clean with soap and water. Remove contaminated clothing.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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

5. Firefighting measures:

5.1 Extinguishing media

Suitable extinguishing media

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

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 (CO); Carbon dioxide (CO₂)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

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.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

7. Handling and storage:

7.1 Precautions for safe handling

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale vapours.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep container tightly closed and dry in a cool, well-ventilated Place.

Recommended storage temperature

Value 5 - 35°C

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available

8. Exposure controls/personal protection:

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protection equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye/face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). 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	nitrile rubber		
Material thickness	>	0,4	mm
Breakthrough time	>	480	min
Appropriate Material	neoprene		
Material thickness	>	0,4	mm
Breakthrough time	>	480	min

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

9. Physical and chemical properties:

9.1 Information on basic physical and chemical properties

State of aggregation

liquid

Form/Colour

liquid
product specific

Odour

Characteristic

pH value

No data available

boiling point/boiling range

No data available

Melting point/freezing point

No data available

Decomposition temperature

No data available

Flash point

Value	250 °C
Method	EN ISO 13736
Source	supplier

Ignition temperature

No data available

flammability

No data available

Lower explosion limit

No data available

Upper explosion limit

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Relative density

No data available

Density

Value	0,93g/cm ³
Reference temperature	20°C
Source	supplier

Solubility in Water

Source	supplier
Comments	insoluble

Solubility

No data available

Partition coefficient: n-octanol/water

No data available

Viscosity

Value	> 150	s
Type	Efflux time	
Method	DIN 53211 (4mm)	
Source	Supplier	
Value	> 100	s
Type	Efflux time	
Method	ISO 2431 (6mm)	
Source	supplier	

Solvent separation test

Value	< 3%
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Particle characteristics

No data available

9.2 Other information

No data available

10. Stability and reactivity:

10.1 Reactivity

No data available

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

strong acids; strong bases; strong oxidizing agents

10.6 Hazardous decomposition products

No data available

11. Toxicological information:

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

Acute oral toxicity

No data available

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/irritation

Source	supplier
Evaluation	Irritation is possible

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT – single exposure

No data available

STOT – repeated exposure

No data available

Aspiration hazard

No data available

11.2 Information on other hazards

Endocrine disrupting properties

No data available.

Other information

No data available.

12. Ecological information:

12.1 Toxicity

Toxicity to fish (acute)

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

PBT assessment: According to the information provided in the supply chain, the mixture does not contain > O. 1% of a substance that is considered to be PBT.

vPvB assessment: According to the information provided in the supply chain, the mixture does not contain > O. 1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data available

12.8 Other information

Do not discharge product unmonitored into the environment.

13. Disposal considerations:

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance With all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

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.

14. Transport information:

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

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 authorization

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

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances subject to restriction as listed in Annex XVII of the REACH regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

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

1.1 Product identifier

Trade name/designation: KH 67 Hardener
Product-no.: KH 67 Hardener included in product line "GHB Pro", "Abox Pro XT" and "Abox Pro XT SL"

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

Relevant identified uses of the substance or mixture

castable resin

Uses advised against

No data available.

1.3 Details of the supplier of the safety data sheet

Company: Günther Spelsberg GmbH & Co.KG
Im Gewerbepark 1
Germany- 58579 Schalksmühle
Telephone: +49 (0) 2355/892-0
Telefax: +49 (0) 2355/892-299
E-Mail: info@spelsberg.de
Dept. responsible for information: Safety and Environmental Management

1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Gif tinformationszentrum Nord)

2. Hazards identification:

2.1 Classification of the substance or mixture

Classification information

This product does not meet the classification and labelling criteria given in the Regulation (EC) No 1272/2008 (CLP).

2.2 Label elements

Not relevant

2.3 Other hazards

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

3. Composition / information on ingredients:

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization

Acid-based hardener

Hazardous ingredients

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II.

4. First aid measures:

4.1 Description of first aid measures

General information

Remove contaminated clothing and shoes and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation

Ensure supply of fresh air.

After Skin contact

When in contact with the skin, clean with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person.

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

5. Firefighting measures:

5.1 Extinguishing media

Suitable extinguishing media

Not combustible under normal conditions. Extinguishing measures to suit surroundings.

Unsuitable extinguishing media

High power water jet.

5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing. Do not allow run-off from fire fighting to enter drains or water courses.

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.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and Place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

7. Handling and storage:

7.1 Precautions for safe handling

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not inhale vapours.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

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

Recommended storage temperature

Value 5 - 35°C

Requirements for storage rooms and vessels

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available

8. Exposure controls/personal protection:

8.1 Control parameters

No parameters available for monitoring.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, local exhaust at the workstation if necessary.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Safety glasses (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). 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	nitrile rubber		
Appropriate Material	neoprene		
Material thickness	>	0,4	mm
Breakthrough time	>	480	min

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

9. Physical and chemical properties:

9.1 Information on basic physical and chemical properties

State of aggregation

Liquid

Colour

No data available

Odour

Characteristic

pH value

No data available

Boiling point/ boiling range

No data available

Melting point/freezing point

No data available

Decomposition temperature

No data available

Flash point (°C)

Value	appr. 300	°C
Method	ISO 13736	
Source	supplier	

Ignition temperature

No data available

Flammability

No data available

Lower explosion limit

No data available

Upper explosion limit

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Relative density

No data available

Density

Value	appr.	0,95	g/cm ³
Method		20°C	
Source		supplier	

Solubility in Water

Source	supplier
Comments	insoluble

Solubility

No data available

Miscible with

not miscible with water

Partition coefficient n-octanol/water (log value)

No data available

Kinematic viscosity

Value	> 21	mm ² /s
Source	supplier	

Solvent separation test

Value	< 3	%
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Particle characteristic

No data available

9.2 Other safety information

Other information

Run-out time:	>	150 s
		Cross section: 4 mm
		Method: DIN 53211
	>	100 s
		Cross section: 6 mm
		Method: ISO 2431

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 normal conditions of use.

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

10.5 Incompatible materials

Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.6 Hazardous decomposition products

None, if handled according to intended use. In case of fire: see section 5.

11. Toxicological information:

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

Acute oral toxicity

No data available

Acute dermal toxicity

No data available

Acute inhalational toxicity

No data available

Skin corrosion/ irritation

No data available

Serious eye damage/ irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Reproduction toxicity

No data available

Carcinogenicity

No data available

STOT – single exposure

No data available

STOT – repeated exposure

No data available

Aspiration hazard

No data available

11.2 Information on other hazards

Endocrine disrupting properties

Pursuant to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605, the product does not contain any endocrine disruptors in a concentration of $\geq 0.1\%$ weight by weight and above.

Other information

No data available.

12. Ecological information:

12.1 Toxicity

Toxicity to fish (acute)

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties

Pursuant to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605, the product does not contain any endocrine disruptors in a concentration of 0.1% weight by weight and above.

12.7 Other adverse effects

No data available.

12.8 Other information

Do not discharge product unmonitored into the environment.

13. Disposal considerations:

13.1 Waste treatment methods

Product

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility. Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

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.

14. Transport information:

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI 1 IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

Not relevant

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

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances subject to restriction as listed in Annex XVII of the REACH regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

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.

16. Other information:

Sources of key data used to compile the data sheet:

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

Further information

Issuing agent:

Günther Spelsberg GmbH & Co. KG
Department Safety and Environmental Management

Contact:

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e-mail: tre@spelsberg.de

The information in this safety data sheet is correct to the best of our knowledge at the date of its publication. The information is intended to advice about the safe handling of the named product for storage, processing, transport and disposal. The details are not transferable to other products. As far as the mentioned product in this SDS is blended with other materials or processed, the information contained in this safety data sheet do not apply, unless otherwise expressly provided therein.