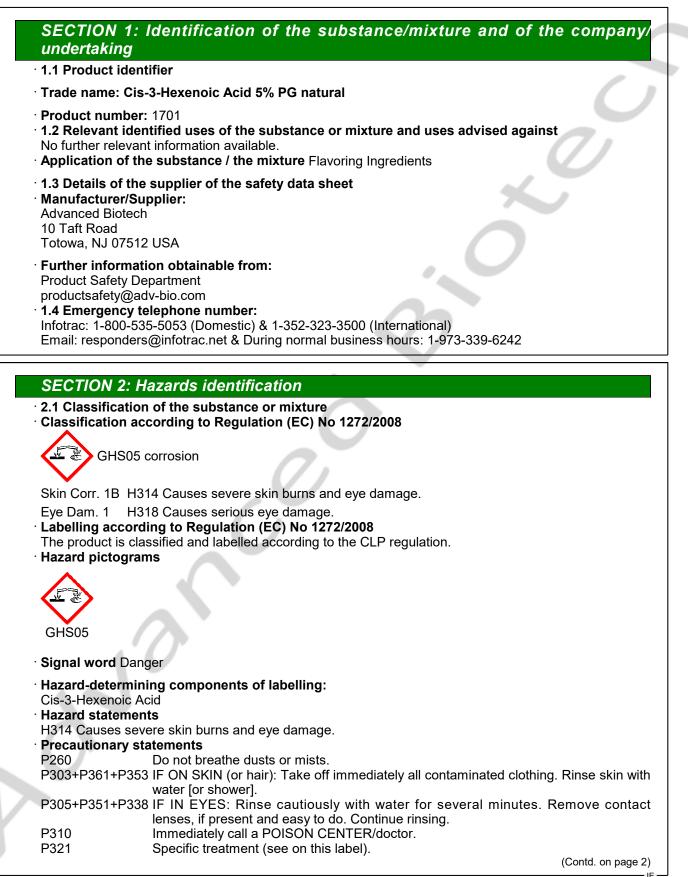


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P405 P501 Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

<sup>·</sup> 2.3 Other hazards

· Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

## · 3.2 Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

· Dangerous components:		
CAS: 57-55-6	Propylene glycol	50-100%
EINECS: 200-338-0	substance with a Community workplace exposure limit	
	Cis-3-Hexenoic Acid	≥5-<10%
EINECS: 217-205-8	🚸 Skin Corr. 1B, H314; 🚸 Eye Irrit. 2, H319	
<ul> <li>Additional information: For the wording of the listed hazard phrases refer to section 16.</li> </ul>		

## SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

# SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- · Suitable extinguishing agents:
- CO2, powder or alcohol resistant foam.

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.
- Additional information
- Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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# SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Mount respiratory protective device.
- Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions:
   Dilute with plenty of water.
   Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent.

Dispose contaminated material as waste according to section 13. Ensure adequate ventilation.

**6.4 Reference to other sections** See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

# SECTION 7: Handling and storage

• 7.1 Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

· Information about fire - and explosion protection: Keep respiratory protective device available.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Please refer to the product specification and/or Certificate of Analysis for product storage requirements. Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep container tightly sealed.
- 7.3 Specific end use(s) No further relevant information available.

## SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

## · Ingredients with limit values that require monitoring at the workplace:

## CAS: 57-55-6 Propylene glycol

OEL Long-term value: 470\* 10\*\* mg/m³, 150\* ppm

\*total vapour and particulates \*\*particulates

• Additional information: The lists valid during the making were used as a basis.

- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see section 7.
- Individual protection measures, such as personal protective equipment
   General protective and hygienic measures:
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing
- Wash hands before breaks and at the end of work.

## Avoid contact with the eyes.

Avoid contact with the eyes and skin.

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(Contd. of page 3) · Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device. · Hand protection Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · Penetration time of glove material The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed. Eye/face protection Tightly sealed goggles SECTION 9: Physical and chemical properties • 9.1 Information on basic physical and chemical properties · General Information · Physical state Liquid Colour: According to product specification · Odour: According to product specification · Odour threshold: Not determined. • Melting point/freezing point: -68 °C · Boiling point or initial boiling point and boiling range Undetermined. · Flammability Not applicable. · Lower and upper explosion limit 2.6 Vol %

- · Lower:
- · Upper:
- · Flash point:
- Auto-ignition temperature: Decomposition temperature:
- · pH
- · Viscosity:
- · Kinematic viscosity · Dynamic:

- >110 °C 371 °C Not determined. Not determined.
- Not determined. Not determined.

12.6 Vol %

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Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log va	alue) Not determined.
Vapour pressure at 20 °C:	0.1 hPa
Density and/or relative density	
Density at 20 °C:	1.03624 g/cm <sup>3</sup>
Relative density	Not determined.
Refractive Index	
Vapour density	Not determined.
9.2 Other information	
Appearance:	
Form:	Liquid
Important information on protection of he	aith
and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard.
Solvent content:	
Organic solvents:	95.0 %
VOC (EC) Solids content:	0.00 % 0.0 %
	0.0 %
Change in condition Evaporation rate	Not determined.
•	
Information with regard to physical has	zard
classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure Flammable liquids	Void Void
Flammable solids	Void Void
Self-reactive substances and mixtures	Void Void
Pyrophoric liquids	Void Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit	Void
flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void
	1014

# SECTION 10: Stability and reactivity

• 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

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- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No dangerous decomposition products known.

## SECTION 11: Toxicological information

- 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- Skin corrosion/irritation Causes severe skin burns and eye damage.
- · Serious eye damage/irritation Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards

## · Endocrine disrupting properties

None of the ingredients is listed.

## **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- 12.6 Endocrine disrupting properties
- The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

# SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
- Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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· Uncleaned packaging:

- Recommendation: Disposal must be made according to official regulations.
   Recommended cleansing agents: Water, if necessary together with cleansing agents.

14.1 UN number or ID number	
ADR, IMDG, IATA	UN1760
14.2 UN proper shipping name ADR	1760 CORROSIVE LIQUID, N.O.S. (Cis-3-Hexeno
	Acid)
IMDG, IATA	CORROSIVE LIQUID, N.O.S. (Cis-3-Hexenoic Acid)
14.3 Transport hazard class(es)	
ADR	
Class	8 (C9) Corrosive substances.
Label	8
IMDG, IATA	
Class Label	8 Corrosive substances. 8
14.4 Packing group	
ADR, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Warning: Corrosive substances.
Hazard identification number (Kemler code):	
EMS Number:	F-A,S-B
Segregation groups	(SGG1) Acids
Stowage Category Stowage Code	A SW2 Clear of living quarters.
14.7 Maritime transport in bulk according to	
IMO instruments	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L



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· Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
<ul> <li>Transport category</li> </ul>	3
<ul> <li>Tunnel restriction code</li> </ul>	E C
·IMDG	
<ul> <li>Limited quantities (LQ)</li> </ul>	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1760 CORROSIVE LIQUID, N.O.S. (CIS-3-
	HEXENOIC ACID), 8, III

# SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Labelling according to Regulation (EC) No 1272/2008
- The product is classified and labelled according to the CLP regulation.
- Hazard pictograms



- · Signal word Danger
- Hazard-determining components of labelling: Cis-3-Hexenoic Acid
- · Hazard statements
- H314 Causes severe skin burns and eye damage.
- · Precautionary statements
- P260 Do not breathe dusts or mists.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- P310 Immediately call a POISON CENTER/doctor.
- P321 Specific treatment (see on this label).
- P405 Store locked up. P501 Dispose of conte
  - Dispose of contents/container in accordance with local/regional/national/international regulations.
- Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

 DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

## Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

 Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

## **Relevant phrases**

H314 Causes severe skin burns and eye damage. H319 Causes serious eye irritation.

- · Department issuing SDS: Product safety department
- · Contact:

Product Safety Department

productsafety@adv-bio.com • Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Eye Irrit. 2: Serious eye damage/eye irritation - Category 2