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Safety data sheet according to 1907/2006/EC, Article 31

902800

Revision: 13.04.2012 Printing date: 07.07.2016

01 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- Trade name: (Ile⁷⁶)-TNF-α (70-80) (human)
- Article number:

new: 4026411 old: H-2698

- CAS Number: 163045-82-7
- · Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation Laboratory chemicals
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Bachem AG

Hauptstrasse 144

CH-4416 Bubendorf

Switzerland

E-mail msds@bachem.com

Tel +41 58 595 2021

Fax +41 58 595 2040

· Further information obtainable from:

Department: Marketing

Emergency telephone number:
 +41 44 251 51 51 (Tox Info Suisse)

* 02 Hazards identification

- · Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008
 Void
- · Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
- · Signal word

Void

· Hazard statements

Void

- Other hazards
- · Results of PBT and vPvB assessment
- PBT:

Not applicable.

vPvB:

Not applicable.

03 Composition/information on ingredients

· Chemical characterization: Substances

CAS No. Description

163045-82-7 (Ile⁷⁶)- $\dot{T}NF$ - α (70-80) (human)

- Identification number(s)
- EC number:

· RTECS Number:



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04 First aid measures

- · After inhalation:
 - Supply fresh air; consult doctor in case of complaints.
- · After skin contact:
 - Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:
- Rinse opened eye for several minutes under running water.
- · After swallowing:
 - Call a doctor immediately.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed
 - No further relevant information available.
- Indication of any immediate medical attention and special treatment needed

No further relevant information available.

05 Firefighting measures

- · Suitable extinguishing agents:
- CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · Special hazards arising from the substance or mixture
 - No further relevant information available.
- · Advice for firefighters
- · Protective equipment:
 - No special measures required.

06 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Not required.
- · Environmental precautions:
 - No special measures required.
- Methods and material for containment and cleaning up:

Pick up mechanically.

07 Handling and storage

- Handling:
- · Precautions for safe handling

Prevent formation of dust.

- · Information about fire and explosion protection:
 - No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Store away from foodstuffs.

• Further information about storage conditions:

Store in dry conditions.

- Recommended storage temperature:
 - -20 +/- 5 °C
- · Specific end use(s)

No further relevant information available.





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08 Exposure controls/personal protection

• Ingredients with limit values that require monitoring at the workplace:

CAS No. Designation of material

Not required.

· Additional information:

The lists valid during the making were used as basis.

- · Personal protective equipment:
- General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

· 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.

Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:

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 on consideration of the penetration times, rates of diffusion and the degradation Protective gloves

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.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Safety glasses

09 Physical and chemical propert	ies
General Information	
Appearance:	
Form:	Powder
Colour:	White
Odour:	Nearly odourless
Odour threshold:	Not determined.
Molecular Weight	1.218,4200 g/mol
Change in condition	
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Self-igniting:	Not determined.
Danger of explosion:	Not determined.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapour pressure:	Not determined.
Density:	Not determined.
Solubility in / Miscibility with	
water:	at 25 ℃ 1,00 g/l
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information	No further relevant information available.

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PRODUCT: (Ile^{76})-TNF- α (70-80) (human)

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:
 No decomposition if used according to specifications.

· Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

No further relevant information available.

· Incompatible materials:

No further relevant information available.

 Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Acute toxicity:

No further relevant information available.

- · Primary irritant effect:
- · on the skin:

No further relevant information available.

· on the eye:

No further relevant information available.

- · Sensitization:
 - No sensitizing effects known.
- · Additional toxicological information:

The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- · Acquatic toxicity:
 - No further relevant information available.
- · Persistence and degradability

No further relevant information available.

- Behaviour in environmental systems:
- Bioaccumulative potential

 No further relevant information

No further relevant information available.

- · Mobility in soil
 - No further relevant information available.
- Additional ecological information:
- General notes:

Not known to be hazardous to water.

- Results of PBT and vPvB assessment
- PBT:

Not applicable.

- vPvB:
 - Not applicable.
- · Other adverse effects

No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Waste disposal key: 18 02 06
- · Uncleaned packaging:
- · Recommendation:

Disposal must be made according to official regulations.

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PRODUCT: (Ile^{76})-TNF- α (70-80) (human)

14 Transport information

ADR/RID class: IMDG Class: ICAO/IATA Class: -

- Environmental hazards:
- Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

- · National regulations:
- · Waterhazard class:
- Generally not hazardous for water. Self-assessment
- · Chemical safety assessment:
 - A Chemical Safety Assessment has not been carried out.

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.

- · Department issuing MSDS:
 - Department: Marketing
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

RTECS: Registry of Toxic Effects of Chemical Substances

WGK: Wassergefährdungsklasse

vPvB: very Persistent and very Bioaccumulative

· * Data compared to the previous version altered.