

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : M3311

Product name :

Urea Molecular Biology Grade

1. Identification of the substance/preparation and of the company

Product identifier

Product Name: Urea Molecular Biology Grade

Catalogue Number: M3311

CAS Number: 57-13-6

EC Number: 200-315-5

REACH-Number: 01-21 19463277-33-XXXX

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

No further relevant information available.

Application of the substance/the preparation

Chemical analytics.

Laboratory chemical.

Details of the supplier of the safety data sheet

Manufacturer /Supplier:

Genaxxon bioscience GmbH, Söflinger Str. 70, 89077 Ulm/Germany.

Tel.: +49 (0)731 3608 123, info@genaxxon.com

Further information obtainable from: Geschäftsleitung / General Management

Emergency telephone number: +49 (0)731 3608 123 (Monday till Friday: 7:30 – 18:30 o'clock)

NOTE: If this product is a kit or supplied with more than one material, please refer to the MSDS for each component for hazard information.

Product Use:

This products are for laboratory research use only and are not intended for human or animal diagnostics, therapeutics or other clinical uses.

2. Hazardous identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

The preparation is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: Not applicable.

Label elements

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable

Classification system:

The classification is according the latest editions of the EU-lists, and extended by company and literature data.

3. Composition/information on ingredients

Chemical characterisation: Substances

CAS-No.: Description

57-13-6 urea

Identification number(s)

EC-number: 200-315-5

Additional Information: For the wording of the listed risk phrases refer to section 16 of this data sheet.

4. First-aid measures

Description of first aid measures

General information: Seek immediate medical advice.

After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: Rinse out mouth. Seek medical treatment.

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.

Contd. on page 2

responsible: GF

printed: 2016-10-05– revised: 2016-10-05

1 of 5

G:\products\MSDS\urea\msds_m3311_urea_en.docx

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : M3311

Product name :

Urea Molecular Biology Grade

Contd. of page 1

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing agents:

Water Spray, Carbon Dioxide, Dry chemical powder, or appropriate foam. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: Water with full jet.

Special hazards arising from the substance or mixture:

Formation of toxic gases is possible during heating or in case of fire.

In case of a fire, the following can be released:

Carbon oxides (CO, CO₂)

Nitrogen oxides (NO_x),

Advice for fire fighters:

Protective equipment:

Mouth respiratory protective device.

Wear self-contained respiratory protective device.

Additional information:

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

Contain escaping vapours with water.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Environmental precautions: Do not allow product to enter sewage system, surface or ground water.

Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

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

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Clean up affected area.

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.

7. Handling and storage

Handling

Precautions for safe handling: No special measures required.

Information about fire – and explosion protection: Normal measures for preventive fire protection. No special measures required.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special measures required.

Information about storage in one common storage facility: No special measures required.

Further information about storage conditions: None

Recommended storage temperature: 15 – 25°C

Storage class: 10-13

Specific end use(s): No further relevant information available.

8. Exposure controls/personal protection

Additional information about design of technical facilities: No further data; see item 7.

Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

Exposure controls:

Personal protective equipment:

General protective and hygienic measures:

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

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

Immediately remove all soiled and contaminated clothing.

Respiratory protection:

Contd. on page 3

Contd. of page 2

responsible: GF

printed: 2016-10-05– revised: 2016-10-05

Material safety data sheet

according to 1907/2006/EG, Article 31



Product number : M3311

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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.

Filter FFP 1 (EN 149).

Protection of hands:



Protective gloves (EN 374)

The glove material has to be impermeable and resist ant 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.

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 found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for permeation: Level: >480 min.

As protection from splashes gloves made of the following materials are suitable:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

Value for the permeation: Level ≥ 480 min.

Eye/face protection: Safety glasses



Safety glasses (EN 166)

Body protection:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

9. Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance

Form: Powder
Colour: White
Odour: weak, Ammonia-like

pH value at 20°C (100g/L): ca. 9-10

Change in conditions

Melting point/Melting range: 133°C
Boiling point/Boiling range: Undetermined

Flash point: Not applicable

Flammability (solid, gaseous): Product is not flammable

Decomposition temperature: Not determined

Self-ignition: Product is not self-igniting

Danger of explosion: Product does not present an explosion hazard

Explosion limits:

Lower: Not determined
Upper: Not determined

Vapour pressure: Not applicable

Density (20°C): 1.32g/cm³

Bulk density at 20°C: 780-830kg/m³

Contd. on page 4

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : M3311

Product name :

Urea Molecular Biology Grade

Contd. of page 3

Solubility in / Miscibility with
(water, 20°C):

1000g/L

Viscosity:

Dynamic:

Not applicable

Kinematic:

Not applicable

Solvent content:

Organic solvents:

0.0%

VOC (EC)

0.00%

Other safety information:

No further relevant information available.

10. Stability and reactivity

Reactivity

will react with non-ferrous metal, aluminium and magnesium

Chemical stability

Thermal decomposition / conditions to be avoided: Heating above 70°C.

Possibility of hazardous reactions: Reacts with alkalis releasing ammonia.

Conditions to avoid: No further relevant information available.

Incompatible materials: nitrites, nitrates, strong oxidising agents.

Hazardous decomposition products: In the event of fire: See chapter 5 of this data sheet.

Additional information: Dust explosion possible.

11. Toxicological information

Information on toxicological effects

Acute toxicity:

LD50/LC50 values relevant for classification

57-13-5 urea

Oral	LD50	14300mg/kg (rat)
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Primary irritant effect

on the skin: No irritant effect.

on the eye: No irritating effect.

After inhalation: No further relevant information available.

Sensitization: No sensitizing effect known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

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

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. Ecological Information

Toxicity

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behaviour in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self assessment): slightly hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

Do not allow to enter water, waste water, or soil.

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

Recommendation:

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Contact a licensed professional waste

Contd. on page 5

responsible: GF

printed: 2016-10-05– revised: 2016-10-05

4 of 5

G:\products\MSDS\urea\msds_m3311_urea_en.docx

Material safety data sheet

according to 1907/2006/EG, Article 31



GENAXXON

b i o s c i e n c e

Product number : M3311

Product name :

Urea Molecular Biology Grade

Contd. of page 4

disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

Uncleaned packaging:

Recommendation:

Disposal must be made according to official regulations.

Packaging that may not be cleaned are to be disposed of in the same manner as the product.

Recommended cleansing agents:

Water, if necessary together with cleansing agents.

14. Transport information

UN-Number

ADR, ADN, IMDG, IATA: Void

UN proper shipping name

ADR, ADN, IMDG, IATA: Void

Transport hazard class(es)

ADR, ADN, IMDG, IATA:
Class Void

Packaging group

ADR, IMDG, IATA: Void

Environmental hazards:

Marine pollutant: No

Special precautions for user:

Not applicable

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

Transport/Additional information:

Not dangerous according to the above specifications.

UN "Model Regulation":

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15. Regulatory information

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

National Regulations: Germany

Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous to water.

16. Other information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Genaxxon bioscience GmbH, shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

Disclaimer

This product is for R&D use only. Not for drug, household or other uses.

Abbreviations and Acronyms:

ACAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

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

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

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany).

GHS: Globally Harmonized System of Classification and labeling of Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

IMDG: International Maritime code for Dangerous Goods.

LC50: Lethal concentration, 50 percent.

LD50: Lethal dose, 50 percent.

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