

SAFETY DATA SHEET

I. Identification of product and the company information

Product Name: Recombinant Human Interleukin-18 (rhIL-18)

Product Cat No.: GE10.1/GE10.2

Application of the substance: Confirmed Uses

Manufacturer: BETAGENE Genetic

Add.: SIMBAY PARK, 160 BASHENG, SHANGHAI

Tel: 86 (21) -58593289

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II. Composition/information on ingredients

2.1 Substance

Not Applicable

2.2 Ingredients

This product does not contain hazardous chemicals at concentrations of 1% or greater. This product is not known to contain carcinogens at concentrations of 0.1% or greater.

III. Hazard of identification

3.1 Information concerning particular hazards for human and environment:

The product does not need to be labelled in accordance with EC directives or respective national laws.

3.2 Classification of the substance or mixture

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

3.3 Other Hazards

None

IV. First aid measures

4.1 Description of first aid measures

General information

No special measures required.

After inhalation

Supply fresh air; consult doctor in case of complaint.

After skin contact

Generally the product does not irritate the skin.

After eye contact

Rinse opened eye for several minutes under running water.

After swallowing

Rinse mouth with water. If symptoms persist, consult doctors.

4.2 Most important symptoms and effects, both acute and delayed

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

4.3 Indication of immediate medical attention and special treatment needed

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

V. Fire-fighting measures

5.1 Suitable extinguishing agents

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

In combustion, may emit toxic fumes.

5.3 Precautions for fire-fighters

Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breathing apparatus.

VI. Accidental release measures

6.1 Person-related safety precautions

Not required.

6.2 Environmental precautions

Dilute with plenty of water.

Do not let product enter sewers/surface or ground water.

6.3 Measures for cleaning/collecting

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

6.4 Additional information

No dangerous substances are released.

VII. Handling and storage

7.1 Handling

Information for safe handling

No special measures required.

Information about fire-and explosion protection

No special measures required.

7.2 Safe storage

Requirement to be met by storerooms and receptacles

According the product manual.

Information about storage in one common storage facility

Not required.

7.3 Further information about storage conditions

None.

VIII. Exposure controls / personal protection

8.1 Ingredients with workplace control parameters

The product contains no relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Personal protective equipment

General protective and hygienic measures

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

Respiratory of protection

Not required.

Protection of hands

Use appropriate chemical resistant gloves that are impermeable and resistant to the product/the substance/the preparation. Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Eye protection

Appropriate safety goggles recommended during refilling.

Body protection

Wear appropriate protective clothing.

IX. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form Lyophilized white powder or clear liquid

Color Colorless



Odour Nearly Odourless

Odour Threshold No data available

pH No data available

Melting / Freezing Point No data available

Boiling Point / Range No data available

Flash Point No data available

Vapor Pressure No data available

Vapor Density No data available

Relative Density No data available

Solubility No data available

Explosive Properties No data available

Flammability (Solid, Gas) No data available

Oxidizing Properties No data available

9.2 Other safety information

No data available

X. Stability and reactivity

10.1 Conditions to avoid

No decomposition if used according to specifications.

10.2 Dangerous reactions

No dangerous reactions known.

10.3 Dangerous decomposition products

No dangers decomposition products known.

XI. Toxicological information



11.1 Information on toxicological effects

Acute Toxicity

Classified based on available data

Skin Corrosion / Irritation

Classified based on available data

Serious Eye Damage / Irritation

Classified based on available data

Respiratory or Skin Sensitization

Classified based on available data

Germ Cell Mutagenicity

Classified based on available data

Carcinogenicity

Classified based on available data

Reproductive Toxicity

Classified based on available data

Specific Target Organ Toxicity - Single Exposure

Classified based on available data

Specific Target Organ Toxicity - Repeated Exposure

Classified based on available data

Aspiration Hazard

Classified based on available data

Symptoms / Routes of Exposure

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Ingestion: There may be irritation of the throat.

Skin: There may be mild irritation at the site of contact.

Eyes: There may be irritation and redness.

Delayed / Immediate Effects: No known symptoms.

Additional Information

Classified based on available data

XII. Ecological information

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system

XIII. Disposal considerations

13.1 Recommendation

Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation.

13.2 Uncleaned packaging

Disposal must be made according to official regulations.



XIV. Transport information

This reagent is considered to be non-hazardous for transportation. Not classified as dangerous under 62nd edition of IATA Dangerous Goods Regulations 2021.

XV. Other information

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This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate local and national safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.