RafRBD (c-Raf)
Ras Binding Domain of Raf, c-Raf 1 Kinase
human, recombinant, E. coli

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING
Product Name: RafRBD (c-Raf)
Catalog Number: PR-305
Supplier: Jena Bioscience GmbH
Loebstedter Strasse 71
07749 Jena, Germany
Telephone: +49 - 3641 - 62 85 000
Fax: +49 - 3641 - 62 85 100
e-Mail: info@jenabioscience.com
WWW: http://www.jenabioscience.com

2. HAZARDS IDENTIFICATION
This substance is not classified as dangerous according to Regulation (EC) No. 1272/2008 (EU-GHS/CLP).

3. COMPOSITION/INFORMATION ON INGREDIENTS
Synonyms:
Formula:
Molecular Weight: 9.4 kDa (50 - 132 amino acids)
CAS-No.: 
EC number: 
Classification: -
Concentration:

4. FIRST AID MEASURES
If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary.
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6. ACCIDENTAL RELEASE MEASURES
**Personal precautions**
Avoid dust formation.

**Environmental precautions**
Do not let product enter drains.

**Methods and materials for containment and cleaning up**
Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE
**Handling**
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: store at -80 °C

8. EXPOSURE CONTROLS/PERSOINAL PROTECTION
**Personal protective equipment**

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**
For prolonged or repeated contact use protective gloves.

**Eye protection**
Safety glasses

**Hygiene measures**
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES
**Appearance**
Liquid (Supplied in 32 mM Tris-HCl pH 7.6, 200 mM NaCl, 5 mM MgCl₂ and 5 mM DTT)

**Safety data**

- **pH:** no data available
- **Melting point:** no data available
- **Boiling point:** no data available
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<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
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<tr>
<td>Ignition temperature</td>
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<tr>
<td>Lower explosion limit</td>
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<tr>
<td>Upper explosion limit</td>
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<tr>
<td>Water solubility</td>
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</table>

**10. STABILITY AND REACTIVITY**

**Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Strong oxidizing agents.

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Oxides of phosphorus, Lithium oxides.

**11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

no data available

**Irritation and corrosion**

no data available

**Sensitisation**

no data available

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs and Symptoms of Exposure**

Dermatitis

**Potential Health Effects**

- **Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin:** May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes:** May cause eye irritation.
- **Ingestion:** May be harmful if swallowed.
- **Target Organs:** Liver, Kidney

**12. ECOLOGICAL INFORMATION**

Elimination information (persistence and degradability)
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no data available

Ecotoxicity effects
no data available

Further information on ecology
no data available

13. DISPOSAL CONSIDERATIONS
Product
Observe all federal, state, and local environmental regulations.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION
ADR/RID
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION
Labelling according to EC Directives
The product does not need to be labelled in accordance with EC directives or respective national laws.

16. OTHER INFORMATION
Further information
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