

---

## SAFETY DATA SHEET

Date Created 05/16/2016  
Date Updated  
Version 1.0

---

### Section 1-Identification of the substance/mixture and of the company/undertaking

#### 1.1 Identification of the substance or mixture

Product code : Z03316-10; Z03316-50; Z03316-1

Product name : TNF- $\alpha$ , Bovine

#### 1.2 Company/undertaking identification

GenScript Technologies :

#### 1.3 24 hour Emergency Response:

Emergency Phone #: 1-732-885-9188

Telephone : 1-877-436-7274

Fax : 1-732-210-0262

E-mail address : [product@genscript.com](mailto:product@genscript.com)

Web : <http://www.genscript.com>

#### 1.4 For Research Use Only. Not for use in diagnostic procedures.

---

### Section 2- Hazards identification

#### 2.1 GHS - Classification

##### Signal Word

None

##### Health hazards

Not classified

##### Physical hazards

Not classified

##### Hazard Statements

Not Applicable

##### Precautionary Statements

Not Applicable

#### 2.2 Principle Routes of Exposure Potential Health Effects

##### Eyes

May cause eye irritation with susceptible persons.

##### Skin

May cause skin irritation in susceptible persons.

##### Inhalation

May be harmful by inhalation.

##### Ingestion

May be harmful if swallowed.

#### 2.3 Specific effects

##### Carcinogenic effects

None.

##### Mutagenic effects

None.

##### Reproductive toxicity

None.

---

860 Centennial Ave., Piscataway, NJ 08854, USA

Toll-Free: 1-877-436-7274 Tel: 1-732-885-9188 Fax: 1-732-210-0262 Email: [order@genscript.com](mailto:order@genscript.com) Web: [www.genscript.com](http://www.genscript.com)

Confidential

---

**Sensitization**

none

**Target Organ Effects**

No known effects under normal use conditions.

**2.4 HMIS**

Health	0
Flammability	0
Reactivity	0

**Section 3- Composition/information on ingredients**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

---

**Section 4- First aid measures****4.1 Skin contact**

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

**4.2 Eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

**4.3 Ingestion**

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

**4.4 Inhalation**

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

**4.4 Notes to Physician**

Treat symptomatically.

---

**Section 5- Firefighting measures****5.1 Suitable extinguishing media**

Water spray. Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical.

**5.2 Special protective equipment for firefighters**

Standard procedure for chemical fires.

---

**Section 6- Accidental release measures****6.1 Personal precautions**

Always wear recommended Personal Protective Equipment. Use personal protection equipment.

**6.2 Methods for cleaning up**

Soak up with inert absorbent material.

**6.3 Environmental precautions**

No special environmental precautions required.

See Section 12 for more information.

---

**Section 7- Handling and storage****7.1 Handling**

---

**860 Centennial Ave., Piscataway, NJ 08854, USA**Toll-Free: 1-877-436-7274 Tel: 1-732-885-9188 Fax: 1-732-210-0262 Email: [order@genscript.com](mailto:order@genscript.com) Web: [www.genscript.com](http://www.genscript.com)**Confidential**

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

## 7.2 Storage

Keep in a dry, cool and well-ventilated place.

## Section 8- Exposure controls/personal protection

---

### 8.1 Exposure Limits

Contains no substances with occupational exposure limit values

### 8.2 Engineering measures

Ensure adequate ventilation, especially in confined areas.

### 8.3 Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific

#### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Hand protection

Impervious gloves.

#### Eye protection

Wear safety glasses with side shields (or goggles).

#### Skin and Body Protection

Lightweight protective clothing.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 8.4 Environmental exposure controls

No special environmental precautions required.

## Section 9- Physical and chemical properties

---

### 9.1 General information

Form	lyophilized powder
Appearance	No data available
Odor	No data available
Odor Threshold	No data available
Boiling point / boiling range	°C No data available °F No data available
Melting point / melting range	°C No data available °F No data available
flash point:	°C No data available °F No data available
Autoignition Temperature	°C No data available °F No data available
Oxidizing properties	No data available

---

860 Centennial Ave., Piscataway, NJ 08854, USA

Toll-Free: 1-877-436-7274 Tel: 1-732-885-9188 Fax: 1-732-210-0262 Email: [order@genscript.com](mailto:order@genscript.com) Web: [www.genscript.com](http://www.genscript.com)

Confidential

Water solubility

No data available

---

**10.1 Stability**

Stable under normal conditions.

**10.2 Materials to avoid**

No dangerous reaction known under conditions of normal use.

**10.3 Hazardous decomposition**

None under normal use conditions.

**10.4 Products polymerization**

Hazardous polymerization does not occur.

---

**Section 11-Toxicological information****11.1 Acute Toxicity**

No toxicology information is available.

**11.2 Principle Routes of Exposure Potential Health Effects**

eyes	May cause eye irritation with susceptible persons.
Skin	May cause skin irritation in susceptible persons.
inhalation	May be harmful by inhalation.
Ingestion	May be harmful if swallowed.
Carcinogenic effects	None.
Mutagenic effects	None.
Reproductive toxicity	None.
Sensitization	None.

---

**Section 12- Ecological information****12.1 Ecotoxicity**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

**12.2 Mobility**

No information available.

**12.3 Biodegradation**

Inherently biodegradable.

**12.4 Bioaccumulation**

Material does not bioaccumulate.

---

**Section 13- Disposal considerations**

Dispose of contents/containers in accordance with local regulations.

---

**Section 14- Transport information****14.1 IATA**

<b>Proper Shipping Name</b>	No dangerous good in sense of these transport regulations
<b>Hazard Class</b>	None
<b>Subsidiary class</b>	None

---

**860 Centennial Ave., Piscataway, NJ 08854, USA**Toll-Free: 1-877-436-7274 Tel: 1-732-885-9188 Fax: 1-732-210-0262 Email: [order@genscript.com](mailto:order@genscript.com) Web: [www.genscript.com](http://www.genscript.com)**Confidential**

---

<b>Packing group</b>	None
<b>UN-No</b>	None

---

**Section 15- Regulatory information**

---

**15.1 US Federal Regulations****SARA 313**

This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contains HAPs.

**15.2 US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**15.3 WHMIS Hazard Class**

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

---

**Section 16- Other information**

---

**16.1 Reason for revision**

SDS sections updated.

For Research Use Only. Not for use in diagnostic procedures.

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"