



# **Material Safety Data Sheet**

***TGF Beta-1 ELISA***

***Catalog Number: 20-TGF1HU-E01***

## **ALPCO Diagnostics**

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# MATERIAL SAFETY DATA SHEET

according to 91/155 EC

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## 1 Identification of substance

### Product details:

Trade name: TGF- $\beta$ 1 ELISA  
Standard, Assaybuffer, Antiserum

Article number: EIA-1864

### Manufacturer/Supplier:

DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35039 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

## 2 Composition/Data on components

### Chemical characterization

Preparation

### Description:

Mixture of substances listed below with nonhazardous additions.

### Hazardous ingredients:

Proclin 300 T; R20-41-43-48/24/25 0.3%

## 3 Hazard identification

**Hazard description:** not applicable

**Information concerning to particular hazards to man and environment:** not applicable

### Classification system

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

## 4 First aid measures

**General information** No special measures required.

**After inhalation** Supply fresh air; consult doctor in case of complaints.

**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** If symptoms persist consult doctor.

## 5 Fire fighting measures

### Suitable extinguishing agents

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Standard, Assaybuffer, Antiserum**  
Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:**

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

**Additional information:** No dangerous substances are released.

## 7 Handling and storage

**Handling**

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** None.

**Storage class**

**Class according to regulation on flammable liquids:** Void

## 8 Exposure controls and personal protection gear

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

**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.

**Personal protective equipment**

**General protective and hygienic measures**

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

**Respiratory protection:** Not required.

**Protection of hands:** Protective gloves.

**Eye protection:** Goggles recommended during refilling.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Standard, Assaybuffer, Antiserum**  
Article number: EIA-1864

## 9 Physical and chemical properties

**Form:** liquid  
**Colour:** colourless  
**Odour:** odourless  
**Change in condition**  
**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined  
**Flash point:** Not applicable  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Density:** Not determined  
**Solubility in Water:** Fully miscible

## 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.  
**Dangerous reactions** No dangerous reactions known  
**Dangerous decomposition products:** No dangerous decomposition products known

## 11 Toxicological information

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritant effect.  
**Sensitization:** No sensitizing effects known.  
**Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

## 12 Ecological information

**General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.



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**Trade name:** TGF- $\beta$ 1 ELISA  
Standard, Assaybuffer, Antiserum  
**Article number:** EIA-1864

## 13 Disposal considerations

**Product:**

**Recommendation:** Disposal must be made according to official regulation

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulation

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

**Additional information:**

The product is non-hazardous on any transport ways.

## 15 Regulations

**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

**Safety phrases:**

60 This material and its container must be disposed of as hazardous waste.

**National regulations**

**Classification according to VbF:** Void

**Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 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: Product Management

**1 Identification of substance****Product details:**

**Trade name:** TGF- $\beta$ 1 ELISA  
Enzyme Conjugate

**Article number:** EIA-1864

**Manufacturer/Supplier:**

DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

**2 Composition/Data on components****Chemical characterization**

Preparation

**Description:**

Mixture of substances listed below with nonhazardous additions.

**Hazardous ingredients:**

Proclin 300 T; R20-41-43-48/24/25 0.3%

**3 Hazard identification**

**Hazard description:** not applicable.

**Information concerning to particular hazards to man and environment:** not applicable.

**Classification system**

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

**4 First aid measures**

**General information** No special measures required.

**After inhalation** Supply fresh air; consult doctor in case of complaints.

**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** If symptoms persist consult doctor.

**5 Fire fighting measures****Suitable extinguishing agents**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Enzyme Conjugate**  
Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** No special measures required.

**Measures for cleaning/collecting:**

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

**Additional information:** No dangerous substances are released.

## 7 Handling and storage

**Handling**

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** None.

**Storage class**

**Class according to regulation on flammable liquids:** Void

## 8 Exposure controls and personal protection gear

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

**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.

**Personal protective equipment**

**General protective and hygienic measures**

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

**Respiratory protection:** Not required.

**Protection of hands:** Protective gloves.

**Eye protection:** Goggles recommended during refilling.

Trade name: **TGF- $\beta$ 1 ELISA**  
**Enzyme Conjugate**  
Article number: EIA-1864

**9 Physical and chemical properties**

**Form:** liquid  
**Colour:** red  
**Odour:** odourless  
**Change in condition**  
**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined  
**Flash point:** Not applicable  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Density:** Not determined  
**Solubility in Water:** Fully miscible  
**Solvent content:**  
**Organic solvents:** 0 %  
**Water:** 100%

**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.  
**Dangerous reactions:** No dangerous reactions known.  
**Dangerous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritant effect.  
**Sensitization:** No sensitizing effects known.  
**Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.



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**Trade name:** TGF- $\beta$ 1 ELISA  
Enzyme Conjugate  
**Article number:** EIA-1864

## 12 Ecological information

### General notes:

Generally not hazardous for water.

## 13 Disposal considerations

### Product:

**Recommendation:** Smaller quantities can be disposed with household waste.

### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulation.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

### Additional information:

The product is non-hazardous on any transport ways.

## 15 Regulations

### Labelling according to EU guidelines:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

### Safety phrases:

60 This material and its container must be disposed of as hazardous waste.

### National regulations

**Classification according to VbF:** Void

**Waterhazard class:** Generally not hazardous for water.

## 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:** Product Management.

**1 Identification of substance****Product details:**

**Trade name:** TGF- $\beta$ 1 ELISA  
Enzyme Complex

**Article number:** EIA-1864

**Manufacturer/Supplier:**

DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

**2 Composition/Data on components****Chemical characterization**

Preparation

**Description:**

Mixture of substances listed below with nonhazardous additions.

**Hazardous ingredients:**

Proclin 300                      T; R20-41-43-48/24/25                      0.3%

**3 Hazard identification**

**Hazard description:** not applicable.

**Information concerning to particular hazards to man and environment:** not applicable.

**Classification system**

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

**4 First aid measures**

**General information** No special measures required.

**After inhalation** Supply fresh air; consult doctor in case of complaints.

**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** If symptoms persist consult doctor.

**5 Fire fighting measures****Suitable extinguishing agents**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Enzyme Complex**  
Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** No special measures required.

**Measures for cleaning/collecting:**

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

**Additional information:** No dangerous substances are released.

## 7 Handling and storage

**Handling**

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** None.

**Storage class**

**Class according to regulation on flammable liquids:** Void

## 8 Exposure controls and personal protection gear

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

**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.

**Personal protective equipment**

**General protective and hygienic measures**

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

**Respiratory protection:** Not required.

**Protection of hands:** Protective gloves.

**Eye protection:** Goggles recommended during refilling.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Enzyme Complex**  
Article number: EIA-1864

## 9 Physical and chemical properties

**Form:** liquid  
**Colour:** yellow  
**Odour:** odourless  
**Change in condition**  
**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined  
**Flash point:** Not applicable  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Density:** Not determined  
**Solubility in Water:** Fully miscible  
**Solvent content:**  
**Organic solvents:** 0 %  
**Water:** 100%

## 10 Stability and reactivity

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.  
**Dangerous reactions:** No dangerous reactions known.  
**Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritant effect.  
**Sensitization:** No sensitizing effects known.  
**Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.



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**Trade name:** TGF- $\beta$ 1 ELISA  
Enzyme Complex  
**Article number:** EIA-1864

## 12 Ecological information

**General notes:**

Generally not hazardous for water.

## 13 Disposal considerations

**Product:**

**Recommendation:** Smaller quantities can be disposed with household waste.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulation.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

**Additional information:**

The product is non-hazardous on any transport ways.

## 15 Regulations

**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

**Safety phrases:**

60 This material and its container must be disposed of as hazardous waste.

**National regulations**

**Classification according to VbF:** Void

**Waterhazard class:** Generally not hazardous for water.

## 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:** Product Management.

**1 Identification of substance****Product details:**

**Trade name:** TGF- $\beta$ 1 ELISA  
Substrate Solution

**Article number:** EIA-1864

**Manufacturer/Supplier:**

DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

**2 Composition/Data on components****Chemical characterization**

Preparation

**Description:**

Mixture of substances listed below with nonhazardous additions.

**Hazardous ingredients:**

Void

**3 Hazard identification**

**Hazard description:** not applicable.

**Information concerning to particular hazards to man and environment:** not applicable.

**Classification system**

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

**4 First aid measures**

**General information** No special measures required.

**After inhalation** Supply fresh air; consult doctor in case of complaints.

**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** If symptoms persist consult doctor.

**5 Fire fighting measures****Suitable extinguishing agents**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.



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Trade name: **TGF- $\beta$ 1 ELISA**  
**Substrate Solution**  
Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Not required.

**Measures for environmental protection:** No special measures required.

**Measures for cleaning/collecting:**

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

**Additional information:** No dangerous substances are released.

## 7 Handling and storage

**Handling**

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** None.

**Storage class**

**Class according to regulation on flammable liquids:** Void

## 8 Exposure controls and personal protection gear

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

**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.

**Personal protective equipment**

**General protective and hygienic measures**

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

**Respiratory protection:** Not required.

**Protection of hands:** Protective gloves.

**Eye protection:** Goggles recommended during refilling.

Trade name: **TGF- $\beta$ 1 ELISA**  
**Substrate Solution**  
Article number: EIA-1864

**9 Physical and chemical properties**

**Form:** liquid  
**Colour:** colourless  
**Odour:** odourless  
**Change in condition**  
**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined  
**Flash point:** Not applicable  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Density:** Not determined  
**Solubility in Water:** Fully miscible  
**Solvent content:**  
**Organic solvents:** 5 %  
**Water:** 95%

**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.  
**Dangerous reactions** No dangerous reactions known.  
**Dangerous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritant effect.  
**Sensitization:** No sensitizing effects known.  
**Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

**12 Ecological information**

**General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.



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**Trade name:** TGF- $\beta$ 1 ELISA  
Substrate Solution  
**Article number:** EIA-1864

## 13 Disposal considerations

**Product:**

**Recommendation:** Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulation.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

**Additional information:**

The product is non-hazardous on any transport ways.

## 15 Regulations

**Labelling according to EU guidelines:**

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).

**Safety phrases:**

60 This material and its container must be disposed of as hazardous waste.

**National regulations**

**Classification according to VbF:** Void

Technical instructions (air):

Class Share in %

Water 50-100

NK 2.5 - 10

**Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

## 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:** Product Management.



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## 1 Identification of substance

### Product details:

Trade name: TGF- $\beta$ 1 ELISA  
Stop Solution

Article number: EIA-1864

### Manufacturer/Supplier:

DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

## 2 Composition/Data on components

### Chemical characterization

Preparation

### Description:

Mixture of substances listed below with nonhazardous additions.

### Hazardous ingredients:

7664-93-9 sulphuric acid C; R35

2.5 – 10%

## 3 Hazard identification

**Hazard description:** C Corrosive.

**Information concerning to particular hazards to man and environment:** R35 Causes burns.

### Classification system

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

## 4 First aid measures

**General information** Immediately remove any clothing soiled by the product.

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

**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** Drink plenty of water and provide fresh air. Call for a doctor immediately.

## 5 Fire fighting measures

### Suitable extinguishing agents

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Protective equipment:** No special measures required.



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**Trade name:** TGF- $\beta$ 1 ELISA  
Stop Solution  
**Article number:** EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.

**Measures for environmental protection:** Prevent seepage into sewage system, workpits and cellars. Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

### **Measures for cleaning/collecting:**

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

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

## 7 Handling and storage

### **Handling**

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

### **Storage class**

**Class according to regulation on flammable liquids:** Void

## 8 Exposure controls and personal protection gear

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

### **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.

### **Personal protective equipment**

#### **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Respiratory protection:** Not required.

**Protection of hands:** Protective gloves.

**Eye protection:** Tightly sealed goggles.

Trade name: **TGF- $\beta$ 1 ELISA**  
**Stop Solution**  
Article number: EIA-1864

**9 Physical and chemical properties**

**Form:** liquid  
**Colour:** colourless  
**Odour:** odourless  
**Change in condition**  
**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined  
**Flash point:** Not applicable  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product does not present an explosion hazard.  
**Density:** Not determined  
**Solubility in Water:** Fully miscible  
**pH-value:** at 20°C <1  
**Solvent content:**  
**Organic solvents:** 0 %  
**Water:** 95%

**10 Stability and reactivity**

**Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.  
**Dangerous reactions** No dangerous reactions known.  
**Dangerous decomposition products:** No dangerous decomposition products known.

**11 Toxicological information**

**Acute toxicity:**  
**Primary irritant effect:**  
**on the skin:** No irritant effect.  
**on the eye:** No irritant effect.  
**Sensitization:** No sensitizing effects known.  
**Additional toxicological information:**  
The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.  
Corrosive  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.



# MATERIAL SAFETY DATA SHEET

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**Trade name:** TGF- $\beta$ 1 ELISA  
Stop Solution  
**Article number:** EIA-1864

## 12 Ecological information

### General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.  
Do not allow product to reach ground water, water course or sewage system.  
Must not reach sewage water or drainage ditch undiluted or unneutralized.  
Danger to drinking water if even small quantities leak into the ground.

## 13 Disposal considerations

### Product:

**Recommendation:** Smaller quantities can be disposed with household waste.

### Uncleaned packaging:

**Recommendation:** Water, if necessary together with cleansing agents.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

### Additional information:

The product is non-hazardous on any transport ways.



# MATERIAL SAFETY DATA SHEET

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**Trade name:** TGF- $\beta$ 1 ELISA  
Stop Solution  
**Article number:** EIA-1864

## 15 Regulations

### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

### Code letter and hazard designation of product:

C Corrosive.

### Risk phrases:

34 Causes burns.

### Safety phrases:

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

60 This material and its container must be disposed of as hazardous waste.

### National regulations

**Classification according to VbF:** Void

**Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

## 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:** Product Management.

**1 Identification of substance****Product details:****Trade name:** TGF- $\beta$ 1 ELISA  
NaOH**Article number:** EIA-1864**Manufacturer/Supplier:**DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

**2 Composition/Data on components****Chemical characterization**

Aqueous solution

**Description:**

Mixture of substances listed below with nonhazardous additions.

**Hazardous ingredients:**

1310-73-2 Sodium hydroxide C; R35 2 – 5%

**3 Hazard identification****Hazard description:** Causes burns.**4 First aid measures****After inhalation:** Fresh air. Call in physician**After skin contact** Wash off with plenty of water. Dab with polyethylene glycol 400.

Immediately remove contaminated clothing.

**After eye contact** Rinse opened eye for at least 10 minutes under running water.

Immediately call in ophtalmologist.

**After swallowing** Drink plenty of water (if necessary several litres), avoid vomiting (risk of perforation!). Immediately call in physician. Do not attempt to neutralize.

**5 Fire fighting measures**

**Suitable extinguishing agents**

In adaption to materials stored in the immediate neighbourhood.

**Special risks:** Non-combustible. Hydrogen may form upon contact with light metals (danger of explosion!). Ambient fire may liberate hazardous vapours.

**Protective equipment:** Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.



# MATERIAL SAFETY DATA SHEET

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Trade name: **TGF- $\beta$ 1 ELISA**

**NaOH**

Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Do not inhale vapours/aerosols. Avoid substance contact. Wear protective equipment. Keep unprotected persons away.

**Measures for environmental protection:** Prevent seepage into sewage system, workpits and cellars. Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

**Measures for cleaning/collecting:** Take up with liquid-absorbent material (sand, diatomite, acid binders, universal binders, sawdust). Forward for disposal. Clean up affected area.

## 7 Handling and storage

### Handling

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

## 8 Exposure controls and personal protection gear

### Personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

### General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Respiratory protection:** Required when vapours/aerosols are generated.

**Protection of hands:** Protective gloves.

**Eye protection:** Tightly sealed goggles.

Trade name: **TGF-β1 ELISA**  
**NaOH**  
 Article number: EIA-1864

## 9 Physical and chemical properties

Form:	liquid
Colour:	colourless
Odour:	odourless
<b>Change in condition</b>	
Melting point/Melting range:	not available
Boiling point/Boiling range:	not available
Flash point:	not available
Self-igniting:	not available
Danger of explosion:	not available
Density:	at 20°C 1.05 g/cm <sup>3</sup>
Solubility in water:	at 20°C soluble
pH-value:	at 20°C ~ 13.7

## 10 Stability and reactivity

**Conditions to be avoided:** no information available.  
**Dangerous reactions / Substances to be avoided:**  
 metals, light metals: Formed could be: hydrogen (risk of explosion!)  
 ammonium compounds: Formed could be: ammonia  
**Dangerous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

**Acute toxicity:** Quantitative data on the toxicity of this product are not available.

**Additional toxicological information:**  
 Property that must be anticipated on the basis from the components of the preparation:  
 After inhalation: burns of mucous membranes.  
 After skin contact: burns, necrosis.  
 After eye contact: burns, necrosis, risk of blindness.  
 After swallowing: burns of mouth, pharynx, mucous membrane, oesophagus gastrointestinal tract. Risk of perforation in the oesophagus and stomach.

**Further data:** The product should be handled with the care usual when dealing with chemicals.

## 12 Ecological information

**Biological effects:** Toxic effect on fish and plankton. Harmful effects due to pH-shift. Death of fish possible. Does not cause biological oxygen deficit. Neutralization possible in waste water treatment plants.

**Further ecologic data:** Do not allow to enter water boies, waste water, or soil.



# MATERIAL SAFETY DATA SHEET

according to 91/155 EC

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**Trade name:** TGF- $\beta$ 1 ELISA  
NaOH  
**Article number:** EIA-1864

## 13 Disposal considerations

### Product / Packaging:

Waste material has to be disposed due to federal environmental regulations.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

### Additional information:

The product is non-hazardous on any transport ways.

## 15 Regulations

### Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on hazardous Materials

### Code letter and hazard designation of product:

**Symbol:** C Corrosive.

**Risk phrases:** 34 Causes burns.

**Safety phrases:** 26-36/37/39-45

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### National regulations

**Waterhazard class:** Water hazard class 1

## 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:** Product Management.

**1 Identification of substance****Product details:****Trade name:** TGF- $\beta$ 1 ELISA  
HCL**Article number:** EIA-1864**Manufacturer/Supplier:**DRG Instruments GmbH  
Frauenbergstrasse 18  
D-35390 Marburg  
Germany

Tel.: +49-(0)6421 / 1700-0

Fax: +49-(0)6421 / 921100

E-Mail: drg@drg-diagnostics.de

http: //www.drg-diagnostics.de

**2 Composition/Data on components****Chemical characterization**

Aqueous solution

**Hazardous ingredients:**

7647-01-0 C; R34 Xi; R37

1 – 5%

**3 Hazard identification**

No hazardous product as specified in Directive 67/548 EC.

**4 First aid measures****After inhalation:** Fresh air.**After skin contact** Wash off with plenty of water. Remove contaminated clothing.**After eye contact** Rinse opened eye for several minutes under running water.

Call in ophthalmologist.

**After swallowing** Drink plenty of water. Consult doctor if feeling unwell.**5 Fire fighting measures****Suitable extinguishing agents**

In adaption to materials stored in the immediate neighbourhood.

**Special risks:** Non-combustible. Hydrogen may form upon contact with light metals (danger of explosion!). Ambient fire may liberate hazardous vapours. The following may develop in event of fire: hydrochloric acid.**Protective equipment:** Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.



# MATERIAL SAFETY DATA SHEET

according to 91/155 EC

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Trade name: **TGF- $\beta$ 1 ELISA**  
**HCl**  
Article number: EIA-1864

## 6 Accidental release measures

**Person-related safety precautions:** Do not inhale vapours/aerosols. Avoid substance contact.

**Measures for environmental protection:** Do not allow to enter sewerage system

**Measures for cleaning/collecting:** Take up with liquid-absorbent material (sand, diatomite, acid binders, universal binders, sawdust). Forward for disposal. Clean up affected area.

## 7 Handling and storage

### Handling

**Information for safe handling:** No special measures required.

**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:** Not required.

**Further information about storage conditions:** Keep receptacle tightly sealed.

## 8 Exposure controls and personal protection gear

### Personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

### General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

**Respiratory protection:** Required when vapours/aerosols are generated.

**Protection of hands:** Protective gloves.

**Eye protection:** Tightly sealed goggles.

Trade name: **TGF- $\beta$ 1 ELISA**  
**HCl**  
Article number: EIA-1864

**9 Physical and chemical properties**

Form:	liquid
Colour:	colourless
Odour:	odourless
Change in condition	
Melting point/Melting range:	not available
Boiling point/Boiling range:	not available
Flash point:	not available
Self-igniting:	not available
Danger of explosion:	not available
Density:	at 20°C 1.02 g/cm <sup>3</sup>
Solubility in water:	at 20°C soluble
pH-value:	at 20°C < 1

**10 Stability and reactivity**

**Conditions to be avoided:** Heating.  
**Dangerous reactions / Substances to be avoided:**  
metals: generation of hydrogen  
The generally known reaction partners of water.  
**Dangerous decomposition products:** in the event of fire see chapter 5.

**11 Toxicological information**

**Acute toxicity:** LC<sub>50</sub> (inhalation, rat): 3124 ppm (V)/1 h (calculated on the pure substance).

**Additional toxicological information:**

Property that must be anticipated on the basis from the components of the preparation:  
After skin contact: Slight irritations.  
After eye contact: Slight irritations.

**Further data:** The product should be handled with the care usual when dealing with chemicals.



# MATERIAL SAFETY DATA SHEET

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**Trade name:** TGF- $\beta$ 1 ELISA  
HCl  
**Article number:** EIA-1864

## 12 Ecological information

**Ecotoxic effects:** Quantitative data on the ecological effect of this product are not available.

**Further ecologic data:** The following applies to HCl in general: Harmful effect on aquatic organism. Harmful effect due to pH-shift.  
Do not allow to enter water boies, waste water, or soil.

## 13 Disposal considerations

**Product / Packaging:**

Waste material has to be disposed due to federal environmental regulations.

## 14 Transport information

**Land transport ADR/RID:** --

**Maritime transport IMDG:** --

**Air transport ICAO-TI and IATA-DGR:** --

**Additional information:**

The product is non-hazardous on any transport ways.

## 15 Regulations

**Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on hazardous Materials

**Code letter and hazard designation of product:**

**Symbol:** C Corrosive.

**Risk phrases:** 34 Causes burns.

37 Irritating to respiratory system.

## 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:** Product Management.