

1 Identification of substance:

- **Product details:**
- **Trade name:** **Immun-Blot® Reagent A, 10 ml**
- **Catalog or product number:** 10004502
- **Application of the substance / the preparation:** Laboratory chemicals
- **Manufacturer/Supplier:**
Bio-Rad Laboratories, Life Science Group
2000 Alfred Nobel Drive
Hercules, California 94547 (510)741-1000
- **Information department:** Technical services, customer support.
- **Emergency information:**
1(800)424-9300 Use only in the event of a CHEMICAL EMERGENCY involving a SPILL, LEAK, FIRE, EXPLOSION or ACCIDENT.
510-741-1000

2 Composition/Information on components:

- **Chemical characterization:**
- **CAS No. Description:**
111-46-6 2,2'-oxybisethanol
- **Identification number(s):**
- **EINECS Number:** 203-872-2
- **EU Number:** 603-140-00-6
- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Emergency overview:**
Xn Harmful
- **Routes of exposure:** Ingestion
- **Information pertaining to particular dangers for man and environment**
R 22 Harmful if swallowed.
- **Classification system**
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **GHS label elements**
Exclamation mark **Warning**
3.1/4 - Harmful if swallowed.
- **Prevention:**
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
- **Response:**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
- **Disposal:**
Dispose of contents/container in accordance with local/regional/national/international regulations.

4 First aid measures

- **General information**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

(Contd. on page 2)
USA

Trade name: Immun-Blot® Reagent A, 10 ml

(Contd. of page 1)

- **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:** Immediately call a doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Protective equipment:** No special measures required.

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).
Dispose contaminated material as waste according to item 13.

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and receptacles:** According to product specification
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
111-46-6 2,2'-oxybisethanol
WEEL 10 mg/m³
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves

(Contd. on page 3)

Material Safety Data Sheet

Printing date 06/03/2008

Reviewed on 01/09/2008

Trade name: Immun-Blot® Reagent A, 10 ml

(Contd. of page 2)

- **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.
- **Eye protection:** Safety glasses

9 Physical and chemical properties:

· **General Information**

Form: liquid
Color: Colorless
Odor: Nearly odorless

· **Change in condition**

Melting point/Melting range: -8.5°C
Boiling point/Boiling range: 245°C

· **Flash point:** > 100°C

· **Ignition temperature:** 225°C

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**
Lower: 0.7 Vol %
Upper: 22 Vol %

· **Vapor pressure at 20°C:** 0.03 hPa

· **Density at 20°C:** 1.12 g/cm³

· **Solubility in / Miscibility with**
Water: Fully miscible
Organic solvents: 99.7 %

· **Solids content:** 0.3 %

10 Stability and reactivity

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

11 Toxicological information

· **Acute toxicity:**

· **LD/LC50 values for hazardous components per OSHA criteria:**

111-46-6 2,2'-oxybisethanol		
Oral	LD50	12565 mg/kg (rat)
Dermal	LD50	11890 mg/kg (rbt)

- **Primary irritant effect:**
· **on the skin:** No irritant effect.
· **on the eye:** No irritant effect.

(Contd. on page 4)

Material Safety Data Sheet

Printing date 06/03/2008

Reviewed on 01/09/2008

Trade name: Immun-Blot® Reagent A, 10 ml

(Contd. of page 3)

- **Sensitization:** No sensitizing effects known.

12 Ecological information:

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

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **Land transport ADR/RID (cross-border)**
- **ADR/RID class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -
- **UN "Model Regulation":** -

15 Regulations

- **SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**
- **Section 302/304 (40CFR355.30 / 40CFR355.40):**
Substance not listed.
- **Section 313 (40CFR372.65):**
Substance is not listed.
- **TSCA (Toxic Substances Control Act):**
Substance is listed.

(Contd. on page 5)

Material Safety Data Sheet

Printing date 06/03/2008

Reviewed on 01/09/2008

Trade name: **Immun-Blot® Reagent A, 10 ml**

(Contd. of page 4)

Carcinogenicity categories

EPA (Environmental Protection Agency)

Substance is not listed.

IARC (International Agency for Research on Cancer)

Substance is not listed.

NTP (National Toxicology Program)

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

MAK (German Maximum Workplace Concentration)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

Markings 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:

Xn Harmful

Risk phrases:

22 Harmful if swallowed.

Safety phrases:

36 Wear suitable protective clothing.

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

National regulations

Class	Share in %
NK	50-100

Water hazard class: Water hazard class 1 (Assessment by list): 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: Environmental Health and Safety.

Contact:

Life Science Group, Environmental Health and Safety, 2000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 741-1000

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000

Abbreviations and acronyms:

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

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

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

(Contd. on page 6)

USA

Material Safety Data Sheet

Printing date 06/03/2008

Reviewed on 01/09/2008

Trade name: **Immun-Blot® Reagent A, 10 ml**

(Contd. of page 5)

LATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

* Data compared to the previous version altered.

USA