

Material Safety Data Sheet

Printing date 06/03/2008

Reviewed on 01/09/2008

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

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 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)

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 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)

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 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 Amendments 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)

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 4)

· **Carcerogenity 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)

IATA: 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 —