



04/05/2010

### Kit Components

Product code	Description
<b>532-1125</b>	<b>LH Elisa Kit Obsolete Kit</b>

Components:

30-4030-1	Active Wash Concentrate 1 Obsolete Product
30-4601-1	LH Standards: A,B,C,D,E,F Obsolete Product
30-4651-1	LH Control Levels I,II Obsolete Product
30-4620-1	LH Enzyme- Conjugate (concentrate) Obsolete Product
30-9755-1	Substrate Obsolete Product
30-9780-1	Stop Solution Obsolete Product

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** Active Wash Concentrate 1
- **Catalog or product number:** 30-4030-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Listing of dangerous and non-hazardous components:**

7732-18-5	water		50-100%
9005-64-5	Tween 20		5-10%
7647-14-5	sodium chloride	Xi; R 36/38	2.5-5%

- **Additional information** For the wording of the listed risk phrases refer to section 15.

**3 Hazards identification**

- **Emergency overview:** not applicable
- **Information pertaining to particular dangers for man and environment**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.  
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **NFPA ratings (scale 0-4)**  
Health = 0  
Fire = 1  
Reactivity = 0

**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.

(Contd. on page 2)

DUS

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Active Wash Concentrate 1

(Contd. of page 1)

- **After swallowing** Induce vomiting and call for medical help.

## 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).
- **Additional information:** No dangerous substances are released.

## 7 Handling and storage

- **Handling**
- **Information for safe handling:**  
No special measures required.  
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:**  
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 that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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.

(Contd. on page 3)

DUS

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Active Wash Concentrate 1

(Contd. of page 2)

· **Eye protection:** Safety glasses**9 Physical and chemical properties:**· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** 100°C

· **Flash point:** > 100°C· **Auto igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Vapor pressure at 20°C:** 23 hPa· **Density at 20°C:** 1.006 g/cm<sup>3</sup>· **Solubility in / Miscibility with**

<b>Water:</b>	Fully miscible
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· **Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	89.1 %

<b>Solids content:</b>	0.7 %
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**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** 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 according to our experience and the information provided to us.

(Contd. on page 4)

DUS

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: Active Wash Concentrate 1**

(Contd. of page 3)

· **Target organs:** Not applicable.

**12 Ecological information:**

· **Additional 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.

**13 Disposal considerations**

· **Product:**

· **Recommendation** 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:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

**15 Regulations**

· **SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

· **Section 313 (40CFR372.65):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

(Contd. on page 5)

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Active Wash Concentrate 1

(Contd. of page 4)

· **NTP (National Toxicology Program)***None of the ingredients is listed.*· **OSHA-Ca (Occupational Safety & Health Administration)***None of the ingredients is listed.*· **Markings 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 (GefStoffV).*· **National regulations**· **Water hazard 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:** *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*· **\* Data compared to the previous version altered.**

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** LH Standards: A,B,C,D,E,F
- **Catalog or product number:** 30-4601-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547 1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization:**
- **CAS No. Description:**  
Equine Serum
- **Identification number(s):**
- **EINECS Number:** 2683383
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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**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.  
R 32 Contact with acids liberates very toxic gas.
- **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.
- **NFPA ratings (scale 0-4)**  
Health = 2  
Fire = 0  
Reactivity = 0

**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.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.

(Contd. on page 2)

DUS

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Standards: A,B,C,D,E,F**

(Contd. of page 1)

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.
- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

**6 Accidental release measures**

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** Dilute with plenty of 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:** Do not store together with acids.
- **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:**

**26628-22-8 sodium azide**

REL (United States)	Short-term value: C 0.3** mg/m <sup>3</sup> , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m <sup>3</sup> , C 0.11* ppm *as HN3 vapor **as NaN3

- **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 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Standards: A,B,C,D,E,F**

(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**

<b>Form:</b>	Liquid
<b>Color:</b>	Light brown
<b>Odor:</b>	sulphurous

· **Change in condition**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined

· **Flash point:** Not applicable

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

<b>Water:</b>	Fully miscible
<b>Organic solvents:</b>	0.0 %

**Solids content:** 0.1 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**  
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** 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.

DUS  
(Contd. on page 4)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: LH Standards: A,B,C,D,E,F

(Contd. of page 3)

**12 Ecological information:**

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

**13 Disposal considerations**

- **Product:**
- **Recommendation**  
Hand over to hazardous waste disposers.  
Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **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:** -

- **Transport/Additional information:**  
This package contains dangerous goods in small quantities and is in all respects in compliance with the applicable international and national government regulation and the IATA Dangerous Goods Regulations.

**15 Regulations**

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8 sodium azide

- **Section 313 (40CFR372.65):**

26628-22-8 sodium azide

- **TSCA (Toxic Substances Control Act):**

26628-22-8 sodium azide

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

(Contd. on page 5)

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: LH Standards: A,B,C,D,E,F

(Contd. of page 4)

· **NTP (National Toxicology Program)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Markings according to EU guidelines:**

Observe the general safety regulations when handling chemicals

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.

32 Contact with acids liberates very toxic gas.

· **Safety phrases:**

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

36/37 Wear suitable protective clothing and gloves.

· **National regulations**· **Water hazard 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:** 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

· **\* Data compared to the previous version altered.**

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** LH Control Levels I,II
- **Catalog or product number:** 30-4651-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547 1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization:**
- **CAS No. Description:**  
Equine Serum
- **Identification number(s):**
- **EINECS Number:** 2683383
- **Additional information:** For the wording of the listed risk phrases refer to section 15.
- **Chemical characterization**

· **Listing of dangerous and non-hazardous components:**

26628-22-8	sodium azide	T+, N; R 28-32-50/53	0.01-0.1%
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**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.  
R 32 Contact with acids liberates very toxic gas.
- **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.
- **NFPA ratings (scale 0-4)**  
Health = 2  
Fire = 0  
Reactivity = 0

**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.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact** Generally the product does not irritate the skin.

(Contd. on page 2)

DUS

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Control Levels I,II**

(Contd. of page 1)

- **After eye contact** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing** Immediately call a doctor.
- **Information for doctor**
- **The following symptoms may occur:** Breathing difficulty

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** Mount respiratory protective device.

**6 Accidental release measures**

- **Person-related safety precautions:** Mount respiratory protective device.
- **Measures for environmental protection:** Dilute with plenty of 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:** Do not store together with acids.
- **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:**

**26628-22-8 sodium azide**

REL (United States)	Short-term value: C 0.3** mg/m <sup>3</sup> , C 0.1* ppm *as HN3 vapor; **as NaN3; Skin
TLV (United States)	Short-term value: C 0.29** mg/m <sup>3</sup> , C 0.11* ppm *as HN3 vapor **as NaN3

- **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 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Control Levels I,II**

(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**

<b>Form:</b>	Liquid
<b>Color:</b>	Light brown
<b>Odor:</b>	sulphurous

· **Change in condition**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined

· **Flash point:** Not applicable

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

<b>Water:</b>	Fully miscible
<b>Organic solvents:</b>	0.0 %

**Solids content:** 0.1 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **Dangerous reactions**  
This product contains sodium azide. Sodium azide can react with copper, brass, lead, and solder in piping systems to form explosive compounds of lead azide and copper azide.
- **Dangerous products of decomposition:** 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.

DUS  
(Contd. on page 4)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: LH Control Levels I,II

(Contd. of page 3)

**12 Ecological information:**

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

**13 Disposal considerations**

- **Product:**
- **Recommendation**  
Hand over to hazardous waste disposers.  
Flush pipes with water frequently if discarding solutions containing sodium azide into metal piping systems.
- **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:** -
- **Transport/Additional information:**  
This package contains dangerous goods in small quantities and is in all respects in compliance with the applicable international and national government regulation and the IATA Dangerous Goods Regulations.

**15 Regulations**

- **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

- **Section 302/304 (40CFR355.30 / 40CFR355.40):**

26628-22-8 sodium azide

- **Section 313 (40CFR372.65):**

26628-22-8 sodium azide

- **TSCA (Toxic Substances Control Act):**

26628-22-8 sodium azide

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

Substance is not listed.

(Contd. on page 5)

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: LH Control Levels I,II

(Contd. of page 4)

· **NTP (National Toxicology Program)**

Substance is not listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not listed.

· **Markings according to EU guidelines:**

Observe the general safety regulations when handling chemicals

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.

32 Contact with acids liberates very toxic gas.

· **Safety phrases:**

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

36/37 Wear suitable protective clothing and gloves.

· **National regulations**· **Water hazard 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:** 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

· \* **Data compared to the previous version altered.**



## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** LH Enzyme- Conjugate (concentrate)
- **Catalog or product number:** 30-4620-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547
- 1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization:**
- **CAS No. Description:**  
7732-18-5 water
- **Identification number(s):**
- **EINECS Number:** 2317912
- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Listing of dangerous and non-hazardous components:**

7732-18-5	water		35-50%
127-09-3	sodium acetate		20-35%
64-19-7	acetic acid, glacial	C; R 10-35	20-35%

- **Additional information** For the wording of the listed risk phrases refer to section 15.

**3 Hazards identification**

- **Emergency overview:** not applicable
- **Information pertaining to particular dangers for man and environment**  
The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- **Classification system**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.  
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **NFPA ratings (scale 0-4)**  
Health = 0  
Fire = 0  
Reactivity = 0

**4 First aid measures**

- **General information** No special measures required.

(Contd. on page 2)

DUS

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Enzyme- Conjugate (concentrate)**

(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** Induce vomiting and call for medical help.

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **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.
- **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.  
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:**

**64-19-7 acetic acid, glacial**

PEL (United States)	25 mg/m <sup>3</sup> , 10 ppm
REL (United States)	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
TLV (United States)	Short-term value: 37 mg/m <sup>3</sup> , 15 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures** The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.

(Contd. on page 3)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Enzyme- Conjugate (concentrate)**

(Contd. of page 2)

- **Material of gloves** Synthetic gloves
- **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**

<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** 0°C  
**Boiling point/Boiling range:** 100°C

· **Flash point:** Not applicable

· **Ignition temperature:** 485°C

· **Auto igniting:** Product is not selfigniting.

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

· **Explosion limits:**

<b>Lower:</b>	4.0 Vol %
<b>Upper:</b>	17.0 Vol %

· **Vapor pressure at 20°C:** 23 hPa

· **Density:** Not determined

· **Solubility in / Miscibility with**

**Water:** Fully miscible

· **Solvent content:**

<b>Organic solvents:</b>	22.4 %
<b>Water:</b>	42.7 %

**10 Stability and reactivity**

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Materials to be avoided:**
- **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:**

**127-09-3 sodium acetate**

Oral	LD50	3530 mg/kg (rat)
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(Contd. on page 4)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Enzyme- Conjugate (concentrate)**

(Contd. of page 3)

**64-19-7 acetic acid, glacial**

Oral	LD50	3310 mg/kg (rat)
------	------	------------------

- **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 according to our experience and the information provided to us.
- **Target organs:** Not applicable.

**12 Ecological information:**

- **Additional ecological information:**
- **General notes:** Generally not hazardous for water.

**13 Disposal considerations**

- **Product:**
- **Recommendation:** 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:** -

· **Transport/Additional information:** Not dangerous according to the above specifications.

DUS

(Contd. on page 5)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: LH Enzyme- Conjugate (concentrate)**

(Contd. of page 4)

**15 Regulations**

· **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

None of the ingredients is listed.

· **Section 313 (40CFR372.65):**

None of the ingredients is listed.

· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Markings 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 (GefStoffV).

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
II	20-35

· **Water hazard 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:** 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

· **\* Data compared to the previous version altered.**

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** Substrate
- **Catalog or product number:** 30-9755-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547  
1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with non-hazardous additions.

- **Listing of dangerous and non-hazardous components:**

7647-14-5	sodium chloride	Xi; R 36/38	50-100%
18996-35-5	sodium dihydrogen citrate		10-20%
54827-17-7	3,3',5,5'-tetramethylbenzidine	T; R 23/24/25	0.1-1.0%

- **Additional information** For the wording of the listed risk phrases refer to section 15.

**3 Hazards identification**

- **Emergency overview:**  
Irritant to eyes.  
Irritant to skin.  
Irritant to respiratory system and skin.  
Xi Irritant
- **Routes of exposure:** Skin
- **Information pertaining to particular dangers for man and environment**  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.  
R 36/38 Irritating to eyes and skin.
- **Classification system**  
The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.  
The classification was made according to OSHA 29CFR 1910.1200 and 1910.1030, and is expanded upon from company and/or literature information.
- **NFPA ratings (scale 0-4)**  
Health = 1  
Fire = 1  
Reactivity = 0

**4 First aid measures**

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

(Contd. on page 2)

DUS

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 11/13/2009

**Trade name: Substrate**

(Contd. of page 1)

- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** Induce vomiting and call for medical help.

**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).

**7 Handling and storage**

- **Handling**
- **Information for safe handling:**  
No special measures required.  
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:** Keep receptacle tightly sealed.

**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:**

**7722-84-1 hydrogen peroxide solution**

PEL (United States)	1.4 mg/m <sup>3</sup> , 1 ppm
REL (United States)	1.4 mg/m <sup>3</sup> , 1 ppm
TLV (United States)	1.4 mg/m <sup>3</sup> , 1 ppm

**68-12-2 N,N-dimethylformamide**

PEL (United States)	30 mg/m <sup>3</sup> , 10 ppm Skin
REL (United States)	30 mg/m <sup>3</sup> , 10 ppm Skin
TLV (United States)	30 mg/m <sup>3</sup> , 10 ppm Skin; BEI

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 3)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 11/13/2009

**Trade name: Substrate**

(Contd. of page 2)

- **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.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves:** Synthetic gloves
- **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  
 Tightly sealed goggles.

**9 Physical and chemical properties:**

· **General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Odorless

· **Change in condition**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** 100°C

· **Flash point:** > 100°C

· **Auto igniting:** Product is not selfigniting.

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

· **Density:** Not determined

· **Solubility in / Miscibility with**

**Water:** Fully miscible

· **Solvent content:**

<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	0.2 %

**10 Stability and reactivity**

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



## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 11/13/2009

Trade name: Substrate

(Contd. of page 3)

**11 Toxicological information**· **Acute toxicity:**· **LD/LC50 values for hazardous components per OSHA criteria:****68-12-2 N,N-dimethylformamide**

Oral	LD50	7600 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rbt)
Inhalative	LC50/4 h	9400 mg/l (mus)

· **Primary irritant effect:**· **on the skin:** Irritant to skin and mucous membranes.· **on the eye:** Irritant effect.· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

Irritant

· **Target organs:**

Skin.

Eye.

**12 Ecological information:**· **Additional 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.

**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:** -

(Contd. on page 5)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 11/13/2009

**Trade name: Substrate**

(Contd. of page 4)

**· Maritime transport IMDG:**

· **IMDG Class:** -

· **Marine pollutant:** No

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

· **ICAO/IATA Class:** -

**· Transport/Additional information:**

*This package contains dangerous goods in small quantities and is in all respects in compliance with the applicable international and national government regulation and the IATA Dangerous Goods Regulations.*

**15 Regulations**

**· SARA (Superfund Amendants and Reauthorization Act of 1986 - USA)**

**· Section 302/304 (40CFR355.30 / 40CFR355.40):**

7722-84-1 | hydrogen peroxide solution

**· Section 313 (40CFR372.65):**

68-12-2 | N,N-dimethylformamide

**· TSCA (Toxic Substances Control Act):**

All ingredients are listed.

**· Carcinogenic categories**

**· IARC (International Agency for Research on Cancer)**

7722-84-1 | hydrogen peroxide solution

3

68-12-2 | N,N-dimethylformamide

3

**· NTP (National Toxicology Program)**

None of the ingredients is listed.

**· OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is 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:**

Xi Irritant

**· Risk phrases:**

36/38 Irritating to eyes and skin.

**· Safety phrases:**

3 Keep in a cool place.

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

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

45 In case of accident or if you feel unwell, seek medical advice immediately.

(Contd. on page 6)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 11/13/2009

**Trade name: Substrate**

(Contd. of page 5)

- **National regulations**
- **Technical instructions (air):**

Class	Share in %
I	0.1-1.0
NK	0.1-1.0

- **Water hazard 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:** 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*

- \* **Data compared to the previous version altered.**

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

**1 Identification of substance:**

- **Product details:**
- **Trade name:** Stop Solution
- **Catalog or product number:** 30-9780-1
- **Application of the substance / the preparation** In-vitro laboratory reagent or component
- **Manufacturer/Supplier:**  
Bio-Rad Laboratories, Diagnostic Group  
4000 Alfred Nobel Drive  
Hercules, California 94547 1(510)724-7000
- **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.

**2 Composition/Information on components:**

- **Chemical characterization:**
- **CAS No. Description:**  
7664-93-9 sulphuric acid
- **Identification number(s):**
- **EINECS Number:** 231-639-5
- **Index number:** 016-020-00-8
- **Additional information:** For the wording of the listed risk phrases refer to section 15.

**3 Hazards identification**

- **Emergency overview:**  
Corrosive.  
May cause irreversible eye damage.  
C Corrosive
- **Information pertaining to particular dangers for man and environment**  
R 35 Causes severe burns.
- **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.
- **NFPA ratings (scale 0-4)**  
Health = 4  
Fire = 0  
Reactivity = 0

**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. Then consult a doctor.
- **After swallowing** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Stop Solution

(Contd. of page 1)

**5 Fire fighting measures**

- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Protective equipment:** No special measures required.

**6 Accidental release measures**

- **Person-related safety precautions:** Wear protective equipment (See section 8). Keep unprotected persons away.
- **Measures for environmental protection:** No special measures required.
- **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.  
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:** Keep receptacle tightly sealed.

**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:** Not required.
- **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.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.
- **Protection of hands:** Protective gloves.
- **Material of gloves** Synthetic gloves
- **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

(Contd. on page 3)

## Material Safety Data Sheet

Printing date 04/05/2010

Reviewed on 10/21/2009

Trade name: Stop Solution

Tightly sealed goggles.

(Contd. of page 2)

**9 Physical and chemical properties:****· General Information**

<b>Form:</b>	Liquid
<b>Color:</b>	Clear
<b>Odor:</b>	Odorless

**· Change in condition**

**Melting point/Melting range:** undetermined  
**Boiling point/Boiling range:** undetermined

**· Flash point:** Not applicable

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

**· Vapor pressure at 20°C:** <0.01 hPa

**· Density at 20°C:** 1.84 g/cm<sup>3</sup>

**· Solubility in / Miscibility with**

**Water:** Not miscible or difficult to mix

**· pH-value at 20°C:** 1

**· Organic solvents:** 0.0 %

**10 Stability and reactivity**

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

**11 Toxicological information**

- Acute toxicity:**
- Primary irritant effect:**
- on the skin:** Strong caustic effect on skin and mucous membranes.
- on the eye:** Strong caustic effect.
- Sensitization:** No sensitizing effects known.
- Additional toxicological information:**  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.
- Target organs:** Skin.

DUS

(Contd. on page 4)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: Stop Solution**

(Contd. of page 3)

**12 Ecological information:**

**Additional ecological information:**

**General notes:**

Generally not hazardous for water.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

**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.

**14 Transport information**

**DOT regulations:**

- Hazard class:** 8
- Identification number:** UN1830
- Packing group:** II
- Proper shipping name (technical name):** SULPHURIC ACID
- Label:** 8

**Land transport ADR/RID (cross-border)**

- ADR/RID class:** 8 Corrosive substances
- Danger code (Kemler):** 80
- UN-Number:** 1830
- Packing group:** II
- Label:** 8
- Description of goods:** 1830 SULPHURIC ACID

**Maritime transport IMDG:**

- IMDG Class:** 8
- UN Number:** 1830
- Label:** 8
- Packing group:** II
- EMS Number:** F-A,S-B
- Marine pollutant:** No
- Proper shipping name:** SULPHURIC ACID

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

- ICAO/IATA Class:** 8
- UN/ID Number:** 8
- Label:** 8

(Contd. on page 5)

**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: Stop Solution**

(Contd. of page 4)

· **Packing group:** II

· **Transport/Additional information:**

*This package contains dangerous goods in small quantities and is in all respects in compliance with the applicable international and national government regulation and the IATA Dangerous Goods Regulations.*

**15 Regulations**

· **SARA (Superfund Amendments and Reauthorization Act of 1986 - USA)**

· **Section 302/304 (40CFR355.30 / 40CFR355.40):**

Substance is listed.

· **Section 313 (40CFR372.65):**

Substance is listed.

· **TSCA (Toxic Substances Control Act):**

Substance is listed.

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

7664-93-9 sulphuric acid

1

· **NTP (National Toxicology Program)**

7664-93-9 sulphuric acid

K

· **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:**

C Corrosive

· **Risk phrases:**

35 Causes severe burns.

· **Safety phrases:**

1/2 Keep locked up and out of the reach of children.

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

30 Never add water to this product.

45 In case of accident or if you feel unwell, seek medical advice immediately.

· **National regulations**

· **Water hazard 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:** Environmental Health and Safety.

· **Contact:**

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

(Contd. on page 6)



**Material Safety Data Sheet**

Printing date 04/05/2010

Reviewed on 10/21/2009

**Trade name: Stop Solution**

(Contd. of page 5)

Diagnostic Group, Environmental Health and Safety, 4000 Alfred Nobel Drive, Hercules, California, 94547: 1(510) 724-7000  
\* **Data compared to the previous version altered.**

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