



ImmunoSmol

Small molecule antibodies for research, diagnostics & therapy

Safety Data Sheet

According to Regulation (EC) No
1907/2006

Version 08

Revision: 10.09.2019

Useable for:

IS I-0500 L-Homoarginine ELISA

Single components with dangerous ingredients:

REF: BA E-0080

Stop Solution

STOP-SOLN

REF: BA E-2446

D-Reagent

D-REAGENT

REF: IS I-0529

Reducing concentrate

RED-CONC 100x

Not listed single components contain no hazardous substances in concentrations to be declared, a labelling is not required.

1 Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Trade name: Stop Solution STOP-SOLN
Article number: **BA E-0080**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:

laboratory reagent / Immunoassay
The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:
Immumol SAS
229 cours de l'argonne
33000 Bordeaux – France
Phone +33 (0)5 6431 1170
E-Mail contact@immumol.com

2 Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008
Corrosive to metals, Category 1, H290
Skin corrosive, Category 1A, H314

2.2 Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H290 May be corrosive to metals.

Precautionary statements:

P234 Keep only in original packaging.
P390 Absorb spillage to prevent material damage.

2.3 Other hazards

None known.

3 Composition / information on ingredients

3.1 Substances
Not applicable.

3.2 Mixtures
Composition / information on ingredients

CAS: 7664-93-9 sulphuric acid $\geq 1\% - < 5\%$
H290; H314

Additional information

For the full text of the H-Statements mentioned in this section, see section 16.

4 First aid measures

4.1 First aid measures

After inhalation: fresh air, consult doctor in case of complaints.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

After swallowing: drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

No special precautionary measures necessary.

6.3 Methods and materials for containment and cleaning up

Observe possible material restrictions! Take up with liquid-absorbent and neutralising material. Dispose of properly. Clean up affected area.

6.4 Reference to other sections

Indications about possible material restrictions see sections 7 and 10 and about waste treatment see section 13.

7 Handling and storage

7.1 Precautions for safe handling

Advice on safe handling:

Observe label precautions.

Hygiene measures:

Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:

Tightly closed and dry.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 Exposure controls / personal protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures:

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection:

In case of good room ventilation, not necessary.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves.

Material of gloves:

Chemical protection gloves are to be selected according to the concentration and quantity of the hazardous substance concentration and quantity in workplace.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Eye protection:

Tightly sealed goggles



Body protection:

lab coat

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	odourless
Odour Threshold	Not applicable
pH	ca. 1.0 at 20 °C
Melting point	No information available
Boiling point/boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Lower explosion limit	No information available
Upper explosion limit	No information available
Vapour pressure	No information available
Relative vapour density	No information available
Density	ca. 1.02 g/cm ³ at 20 °C
Relative density	No information available
Water solubility	at 20 °C soluble
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity, dynamic	No information available
Explosive properties	Not classified as explosive
Oxidizing properties	none

9.2 Other data

Corrosion: May be corrosive to metals.

10 Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

No dangerous decomposition products known.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No information available.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes eye irritation.

Respiratory or skin sensitisation

No sensitizing effects known.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

STOT-single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration hazard

No information available.

11.2 Additional information

On the basis of the morphology of the product, no hazardous properties are to be expected when it is handled and used with appropriate care.
Handle in accordance with good industrial hygiene and safety practice.

12 Ecological information

12.1 Toxicity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Dispose of packaging according to applicable local, state, and federal regulations. Packaging's that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

This product is part of a kit. Information in this section refers to the kit as a whole.

14.1 UN No.

3264

14.2 UN Proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANICS, N.O.S.

14.3 Class

8

14.4 Packing group

III

14.5 Environmental hazards

None.

14.6 Special precautions for user

None.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

15 Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

EU regulations

Major Accident Hazard: SEVESO III

Not applicable

Employment restrictions:

Observe employment restrictions in accordance with the youth employment protection regulations (94/33/EC).

Substances of very high concern (SVHC):

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH).

National legislation

Water hazard class:

not water hazardous

Storage class:

8B

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

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.

Relevant phrases:

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.

Department issuing SDS:

Safety Representative

Contact:

Immumol

1 Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Trade name: **D-Reagent** D-REAGENT
Article number: **BA E-2446**

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses:
laboratory reagent / Immunoassay
The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:
Immumol SAS
229 cours de l'argonne
33000 Bordeaux – France
Phone +33 (0)5 6431 1170
E-Mail contact@immumol.com

2 Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008
Skin Sensitizer, Category 1, H317

2.2 Label elements

REGULATION (EC) No 1272/2008
Hazard pictograms:



Signal word:

Caution

Hazard statements:

H317 May cause an allergic skin reaction.

Precautionary statements:

P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves/ protective clothing.
P302 + P352 IF ON SKIN: Wash with plenty of water/soap.
P333 + P313 If skin irritation or a rash occurs: Get medical advice/attention.

2.3 Other hazards

None known.

3 Composition / information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Composition / information on ingredients

CAS: 111-30-8 Glutaraldehyde < 1 %

H331; H301; H314; H334, H317, H400

Additional information:

For the full text of the H-Statements mentioned in this section, see section 16.

4 First aid measures

4.1 First aid measures

Eye contact: Immediately rinse thoroughly with plenty of water for at least 10 minutes, even under the eyelids. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin contact: Remove contaminated clothing immediately; ensure self-protection. Clean with plenty of water and soap.

Ingestion: Immediate strong rinsing of the mouth. Drink water in small sips (dilution effect).

Inhalation: Fresh air. Consult a physician. In case of respiratory arrest: Immediately use mechanical ventilation, oxygen supply if necessary.

Protection of First-aiders: Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation, ingestion or skin contact may cause damage to health. May cause allergic skin reactions. May irritate gastrointestinal tract. Temporary complaints such as coughing, dizziness, nausea, tiredness, headaches may occur. May cause health problems such as lung damage. Sensitized persons may react to very low concentrations of glutaraldehyde and should therefore have no further contact with these substances.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

No information available.

5.2 Special hazards arising from the substance or mixture

Ambient fire may cause dangerous fumes.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Note for untrained emergency personnel: Do not inhale vapour/aerosol. Avoid substance contact. Provide adequate ventilation. Clear danger zone, proceed according to emergency plan, call in experts.

6.2 Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Wear protective goggles and gloves when removing. Seal the sewer system. After spilling, absorb with absorbent material and proceed as described under Disposal considerations.

6.4 Reference to other sections

Refer to protective measures listed in sections 8 and 13.

7 Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Do not expose to eyes, skin or clothing. Change contaminated clothing immediately. Preventive skin protection. Wash hands after work. Use skin care products after skin cleansing at the end of work (moisturizing cream). Do not take. Do not inhale vapours and spray mist.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:
Tightly closed and dry.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 Exposure controls / personal protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Engineering measures:
Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.
See section 7.1.

Individual protection measures:

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection:

In case of good room ventilation, not necessary.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves.

Material of gloves:

Chemical protection gloves are to be selected according to the concentration and quantity of the hazardous substance concentration and quantity in workplace.

The glove material has to be impermeable and resistant to the product / the substance / the preparation.

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Eye protection:

Tightly sealed goggles



Body protection:

lab coat

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	No information available
Odour Threshold	No information available
pH	No information available
Melting point	No information available
Boiling point/boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Lower explosion limit	No information available
Upper explosion limit	No information available
Vapour pressure	No information available
Relative vapour density	No information available
Density	No information available
Relative density	No information available
Water solubility	Completely soluble
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available

Decomposition temperature	No information available
Viscosity, dynamic	No information available
Explosive properties	Not classified as explosive
Oxidizing properties	none

9.2 Other data

No other data available.

10 Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

10.4 Conditions to avoid

heating

10.5 Incompatible materials

Aluminium, various metals

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No information available.

Skin corrosion/irritation

No information available.

Serious eye damage/irritation

No information available.

Respiratory or skin sensitisation

May cause allergic skin reactions.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

STOT-single exposure

No information available.

STOT-repeated exposure

No information available.

Aspiration hazard

No information available.

11.2 Additional information

On the basis of the morphology of the product, no hazardous properties are to be expected when it is handled and used with appropriate care.

12 Ecological information

12.1 Toxicity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Dispose of packaging according to applicable local, state, and federal regulations. Packaging's that may not be cleansed are to be disposed of in the same manner as the product.

14 Transport information

This product is part of a kit. Information in this section refers to the kit as a whole.

14.1 UN No.

No dangerous good in sense of this transport regulation.

14.2 UN Proper shipping name

No dangerous good in sense of this transport regulation.

14.3 Class

No dangerous good in sense of this transport regulation.

14.4 Packing group

No dangerous good in sense of this transport regulation.

14.5 Environmental hazards

No.

14.6 Special precautions for user

No.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

15 Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work.

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National legislation

Water hazard class: WGK 2

Storage class: 12

15.2 Chemical Safety Assessment

Chemical Safety Assessment / Reports (CSA/CSR) are not required for mixtures.

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.

Relevant phrases:

H331	Toxic if inhaled
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.

Department issuing SDS:

Safety Representative

Contact:

Immumol

1 Identification of the substance / mixture and of the company / undertaking

1.1 Product identifier

Trade name:

**Reducing
concentrate**

RED-CONC 100x

Article number:

IS I-0529

1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses:

laboratory reagent / Immunoassay
The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer / Supplier:

Immumol SAS
229 cours de l'argonne
33000 Bordeaux – France
Phone +33 (0)5 6431 1170
E-Mail contact@immumol.com

2 Hazards identification

2.1 Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Corrosive to metals, Category 1, H290

Acute oral toxicity, Category 3, H301

Skin Corrosion/irritation, Category 1 A, H314

Serious Eye Damage/Eye Irritation, Category 1, H318

Reproductive Toxicity, Category 1B, H360

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms:



Hazard statements:

H290 May be corrosive to metals.

H301 Toxic if swallowed

H314 Causes severe skin burns and eye damage

H360FD May damage fertility. May damage the unborn child

Signal word:

Danger

Precautionary statements:

P201 Obtain special instructions before use

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a POISON CENTER or doctor/ physician

2.3 Other hazards

None known.

3 Composition / information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Hazardous components (REGULATION (EC) No 1272/2008)

CAS: 16940-66-2	Sodium borohydride	10 – 30 %
CAS: 1310-73-2	Sodium hydroxide	10 – 30 %

Additional information

For the full text of the H-Statements mentioned in this section, see section 16.

4 First aid measures

4.1 First aid measures

General Advice: Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required

Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately.

Inhalation: If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Move to fresh air. Immediate medical attention is required.

Protection of First-aiders: Use personal protective equipment.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or oesophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media:

No information available.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapours. The product causes burns of eyes, skin and mucous membranes.

Hazardous Combustion Products:

Thermal decomposition can lead to release of irritating gases and vapours.

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

7 Handling and storage

7.1 Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not breathe vapours or spray mist. Do not allow contact with water.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions:

Tightly closed and dry.

7.3 Specific end use(s)

Use in laboratories.

8 Exposure controls / personal protection

8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

8.2 Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures:

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection:

In case of good room ventilation, not necessary.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves.

Material of gloves:

Chemical protection gloves are to be selected according to the concentration and quantity of the hazardous substance concentration and quantity in workplace.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Eye protection:

Tightly sealed goggles

Body protection:

lab coat



9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	liquid
Colour	colourless
Odour	odourless

Odour Threshold	Not applicable
pH	ca. 14 at 20 °C
Melting point	No information available
Boiling point/boiling range	120 - 125 °C / 248 - 257 °F
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Lower explosion limit	No information available
Upper explosion limit	No information available
Vapour pressure	No information available
Relative vapour density	No information available
Density	ca. 1.2 g/cm ³ at 20 °C
Relative density	No information available
Water solubility	Completely soluble
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity, dynamic	60.43 mPa.s at 20 °C
Explosive properties	Not classified as explosive
Oxidizing properties	none

9.2 Other data

Corrosion: May be corrosive to metals.

10 Stability and reactivity

10.1 Reactivity

See section 10.3.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions

Hazardous Polymerization: Hazardous polymerization does not occur.
Hazardous Reactions: None under normal processing.

10.4 Conditions to avoid

Incompatible products. Excess heat. Temperatures above 40 °C.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours.

11 Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

Oral: Category 3, ATE = 285 mg/kg

Dermal: Based on available data, the classification criteria are not met

Inhalation: Based on available data, the classification criteria are not met

skin corrosion/irritation: Category 1 A

serious eye damage/irritation: Category 1

reproductive toxicity: Category 1B

11.2 Additional information

Other Adverse Effects:

See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed:

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.

12 Ecological information

12.1 Toxicity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

12.6 Other adverse effects

No further relevant information available.

13 Disposal considerations

13.1 Waste treatment methods

Dispose of packaging according to applicable local, state, and federal regulations.

Packaging's that may not be cleansed are to be disposed of in the same manner as the

product.

14 Transport information

14.1 UN No.

UN 3320

14.2 UN Proper shipping name

Sodium borohydride and sodium hydroxide solution

14.3 Class

8

14.4 Packing group

II

14.5 Environmental hazards

None.

14.6 Special precautions for user

None.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant.

15 Regulatory information

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work.

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National legislation:

Storage class:

8

15.2 Chemical Safety Assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

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.

Relevant phrases:

H290	May be corrosive to metals.
H301	Toxic if swallowed
H314	Causes severe skin burns and eye damage.
H360FD	May damage fertility. May damage the unborn child

Precautionary statements:

P201	Obtain special instructions before use
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310	Immediately call a POISON CENTER or doctor/ physician

Department issuing SDS:

Safety Representative

Contact:

Immumol