

1 Identification

Product identifier

Trade name: **Suspect 5 DNA, Lyophilized**

Catalog or product number: 9703821, 10040687

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

No further relevant information available.

Application of the substance / the mixture Laboratory chemicals

Manufacturer/Supplier:

Bio-Rad Laboratories, Life Science Group

2000 Alfred Nobel Drive

Hercules, California 94547

Technical services, customer support

Isq. Techserv. us@bio-rad.com

Emergency telephone number:

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 Hazard(s) identification

Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Classification according to Directive 67/548/EEC or Directive 1993/45/EC

Irritant to eyes.

Irritant to skin.

Irritant to respiratory system and skin.

Xn: Harmful

R22: Harmful if swallowed.

R36/38: Irritating to eyes and skin.

Information concerning particular hazards for human 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.

Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded upon from company and literature data.

Label elements

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials (Contd. on page 2)

Trade name: **Suspect 5 DNA, Lyophilized**

Code letter and hazard designation of product:



Xn Harmful

Hazard-determining components of labeling:

Tris(hydroxymethyl)aminomethane

Risk phrases:

22 Harmful if swallowed.

36/38 Irritating to eyes and skin.

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.

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

Additional information: Contact with acids may cause release of toxic gases

Emergency overview:

Routes of exposure:

Ingestion

Skin

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3 Composition/information on ingredients

Chemical characterization: Mixtures

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

Listing of dangerous and non-hazardous components:

77-66-1 Tris(hydroxymethyl)aminomethane	Xn R22 Xi R36	35-50%
7647-14-5 sodium chloride	Xi R36/38	35-50%
7791-18-6 magnesium chloride hexahydrate		5-10%
27565-41-9 (R ⁺ , R ⁻)-1,4-dimercaptobutane-2,3-diol	Xn R20/21/22	1.0-2.5%
9007-49-2 DNA from various sources		1.0-2.5%

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

4 First-aid measures

Description of 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 in case of unconsciousness place patient stably in side position for transportation.

After skin contact immediately wash with water and soap and rinse thoroughly.

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· Solubility in / Miscibility with Water:	Fully miscible
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity: dynamic:	Not applicable.
· Kinematic:	Not applicable.
· Solvent content:	0.0 %
· Organic solvents:	0.0 %
· Other information:	No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No dangerous reactions known
- Conditions to avoid: No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

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

· 77-86-1 Tris(hydroxymethyl)aminomethane

Oral [LD50] 5900 mg/kg (rat)

- 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:
Harmful
- Irritant

- 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.

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· Target organs:	
· Skin:	
· Eye:	

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- Additional ecological information:
- General notes: Generally not hazardous for water.
- Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.
- Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Recommendation
- Hand over to hazardous waste disposers.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

14 Transport information

- UN-Number
- DOT, ADR, ADM, IMDG, IATA
- UN proper shipping name
- DOT, ADR, ADM, IMDG, IATA
- Transport hazard class(es)
- DOT, ADR, ADM, IMDG, IATA
- Class
- Packing group
- DOT, ADR, IMDG, IATA
- Environmental hazards:
- Marine pollutant:
- Special precautions for user
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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BIO-RAD
Safety Data Sheet
acc. to OSHA HCS

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UN "Model Regulation"

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- 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):

77-86-1 Tris(hydroxymethyl)aminomethane

7647-14-5 sodium chloride

27565-41-9 (R*,R*)-1,4-dimercaptobutane-2,3-diol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

· NIOSH-Co (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· National regulations

- Water hazard class: Generally not hazardous for water.
- Chemical safety assessment: A Chemical Safety Assessment has not been 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.

Department issuing SDS: 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

Date of preparation / last revision 10/23/2014 / -

Abbreviations and acronyms:

A DR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation

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IATA: International Air Transport Association
ACGIH: American Conference of Governmental Hygienists
EINECS: European Inventory of Existing Commercial Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the IACS)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Skin Irr. 2: Skin corrosion/irritation, Hazard Category 2
Eye Irr. 2A: Serious eye damage/eye irritation, Hazard Category 2
Data compared to the previous version