

Material Safety Data Sheet

Version GHS 5.1
Revision date : 1/22/2018

1 . PRODUCT & COMPANY IDENTIFICATION

Product Name : Laemmli Sample Buffer(4X) , Reducing
Product Cat No : L1100
CAS No : not applicable
Manufacturer/Supplier : GenDEPOT LLC
PO Box 454
Barker, Tx 77413
Emergency Phone : 866.417.0078
Fax : 281-579-6876

2 . HAZARD IDENTIFICATION

OSHA/HCS Status

GHS Classification

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Skin sensitisation (Category 1), H317
Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Heart, H373
Acute aquatic toxicity (Category 2), H401
Chronic aquatic toxicity (Category 2), H411

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

GHS Label elements, including precautionary statements

Pictogram :



Signal word : Danger.

Hazard statement(s) :

H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H373 May cause damage to organs (Liver, Heart) through prolonged or repeated exposure if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s) :

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear eye protection/ face protection.
P280 Wear protective gloves/ protective clothing.
P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P302+P352+P312 IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or doctor/ physician if you feel unwell.
P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
P314 Get medical advice/ attention if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

Hazards not other classified (HNOC) or not covered by GHS

none

3 . COMPOSITION/INFORMATION ON INGREDIENT

Synonyms : none

Component	Classification	Concentration
Glycerol		
CAS No	56-81-5	< 30%
EC No	200-289-5	
Component	Classification	Concentration
2-Mercaptoethanol		
CAS No	60-24-2	10-30%
EC No	200-464-6	
Flam. Liq. 4; Acute Tox. 3; Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H227, H301 + H331, H310, H315, H317, H318, H373, H410		
Component	Classification	Concentration
Sodium dodecyl sulphate		
CAS No	151-21-3	3-15%
EC No	205-788-1	
Flam. Sol. 2; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; Aquatic Acute 2; Aquatic Chronic 3; H228, H302 + H332, H315,		

4 . FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: If breathed in, move person into fresh air.
If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water.
Consult a physician.

In case of eye contact : Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed : Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

5 . FIREFIGHTING MEASURES

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products: Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Sodium oxides .

Further information: Not data available.

6 . ACCIDENTAL RELEASE MEASURES

Personal precaution: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precaution: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for contaminant and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7 . HANDLING AND STORAGE

Precaution for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Condition for safe storage: Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: Store between the following temperatures: 20 to 25°C (68 to 77°F).

8 . EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Glycerol CAS-No 56-81-1	
TWA 5 mg/m ³	USA. Occupational exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA 15 mg/m ³	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
TWA 10 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
TWA 5 mg/m ³	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000

2-Mercaptoethanol CAS-NO 60-24-2	
TWA 0.2 ppm	USA. Workplace Environmental Exposure Levels (WEEL)

Personal protective equipment: .

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Complete suit protecting against chemicals.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9 . PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form	Liquid
Color	Blue

Safety data:

pH	no data available
Melting point	no data available
Freezing point	no data available
Boiling point	no data available
Flash point	no data available
Ignition temperature	no data available
Auto-ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapor pressure	no data available
Density	no data available
Water solubility	Easily soluble in water
Partition coefficient: n-octanol/water	no data available
Relative vapor density	no data available
Odor	Odorless
Odor threshold	no data available
Evaporation rate	no data available

10 . STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

no data available.

Condition to avoid

no data available.

Materials to avoid

Strong bases, Bases, Oxidizing agents, Strong oxidizing agents, Metals

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 . TOXICOLOGICAL INFORMATON

Acute Toxicity No data available

Oral LD50 No data available

Inhalation No data available

Dermal LD50 No data available

Other information on acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Mutagenicity (Germ cell mutagenicity)
no data available

Carcinogenicity
no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

no component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP

no component of this product present at levels greater than or equal to 0.1% is

Reproductive toxicity
no known significant effects or critical hazards.

Teratogenicity
no data available

Aspiration hazard
no data available

Additional information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Specific target organ toxicity— single exposure (GHS)
no data available

Specific target organ toxicity— repeated exposure (GHS)
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation May be harmful if inhaled. Causes respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. Causes skin irritation.
Eyes Causes eye irritation
Aggravated Medical Condition
 Avoid contact with DMSO solutions containing toxic materials or materials with unknown toxicological properties. Dimethyl sulfoxide is readily absorbed through skin and may carry such materials into the body.

Synergistic effects
no known significant effects or critical hazards.

Additional information
RTECS : not applicable

12 . ECOLOGICAL INFORMATION

Toxicity

Product/ingredient name no data available

Persistence and degradability
no data available

Bioaccumulative potential
no data available

Mobility in soil
no data available

PBT and vPvB assessment
no data available

Other adverse effect
no data available

13 . DISPOSAL CONSIDERATIONS

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14 . TRANSPORT INFORMATION

DOT(US) Not dangerous goods

IMDG

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.
(2-Mercaptoethanol)
Marine pollutants : Yes

IATA

UN number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: Environmentally hazardous substance, liquid, n.o.s.

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.

15 . REGULATORY INFORMATION

United States

SARA 302 components : no products were found

SARA 313 components : no products were found

SARA 311/312 : Acute Health Hazard, Chronic Health Hazard

Clean Air Act Section 112(b) : not listed
Hazardous air pollutants (HAPs)

Clean Air Act Section 602 : not listed
Class I substances

Clean Air Act Section 602 : not listed
Class II substances

DEA List I Chemicals : not listed
(Precursor chemicals)

DEA List II Chemicals : not listed
(Essential chemicals)

States Regulation

Massachusetts : Glycerol CAS No 56-81-5 ,
2-Mercaptoethanol CAS NO 7732-18-5
New York : None of the components are listed
New Jersey : Water CAS No 7732-18-5
Glycerol CAS No 56-81-5 ,
2-Mercaptoethanol CAS NO 7732-18-5
Sodium dodecyl sulphate CAS No 151-21-3
2-Amino-2-(hydromethyl)propane-1,3-diol hydrochloride
CAS No 1185-53-1
Pennsylvania : Water CAS No 7732-18-5
Glycerol CAS No 56-81-5 ,
2-Mercaptoethanol CAS NO 7732-18-5
Sodium dodecyl sulphate CAS No 151-21-3
California Prop. 65 Components :
None of the components are listed.

Canada

All components are listed or exempted

Canadian lists
Canadian NPRI : None of the components are listed
CEPA Toxic substances : None of the components are listed

International Regulation

Australia (AICS) :	Not determined.
China Inventory (IECSC) :	Not determined.
Japan Inventory :	Not determined
Korea Inventory :	Not determined
New Zealand Inventory of Chemicals (NZIoC) :	Not determined
Philippines Inventory (PICCS) :	Not determined.
Malaysia Inventory (EHS Register) :	Not determined.
Taiwan inventory (CSNN) :	Not determined.

HIMS Rating:

Health hazard :	4
Chronic Health Hazard :	*
Flammability :	2
Physical hazards :	0

NFPA Rating:

Health Hazard:	3
Fire:	0
Reactivity Hazard:	0

16 . OTHER INFORMATION

This compound is sold only for research use by personnel familiar chemicals and who are well trained in good laboratory habits, such as avoiding spills, keeping hands clean at all times and no rubbing eyes with working in the laboratory.

This solution is sold only in microliter quantities for use in life sciences research. No other use is intended. And any other use may involve substantive hazards.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish or legally valid contractual relationship. GenDEPOT LLC, shall not be held liable for any damage resulting from handling of or from with above product. The burden of safe use of this material rests entirely with the user.

Since the conditions of handling, storage and disposal of this material are beyond our control, it is the responsibility of the user to determine whether the material is fit for a particular purpose and/or suitable for the user's method of use or application, and to determine safe conditions for use of the material, and to assume full responsibility for loss, injury and expense arising out of or in connection with the use of material. NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, REGARDING THE MATERIAL DESCRIBED HEREIN SHALL BE CREATED BY OR INFERRED FROM ANY STATEMENT OR OMISSION FROM THIS MSDS.

Various government agencies and local authorities may have general or specific regulations applicable to the material which may not be covered in this MSDS. It is sole responsibility of the user to examine and confirm for its full compliance with any such regulations.

When the revision of this MSDS is received, please dispose of the old one.

Department issuing MSDS:
GenDEPOT LLC
Safety Department