

SAFETY DATA SHEET

Version 6.2 Revision Date 06/17/2019 Print Date 06/29/2019

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

1.1 Product identifiers

Product name	[:] L-15 Medium (Leibovitz)
Product Number	: L4386
Brand	: Sigma

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

Identified uses	:	Laboratory chemicals, Synthesis of substances
-----------------	---	---

1.3 Details of the supplier of the safety data sheet

Company	:	Sigma-Aldrich Inc. 3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES	
Telephone Fax		+1 314 771-5765 +1 800 325-5052	

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315 Serious eye damage (Category 1), H318

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

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s) H315 H318	Causes skin irritation. Causes serious eye damage.
Precautionary statement(s) P264 P280	Wash skin thoroughly after handling. Wear protective gloves/ eye protection/ face protection.

Sigma - L4386

Page 1 of 8



P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 +	IF IN EYES: Rinse cautiously with water for several minutes.
P310	Remove contact lenses, if present and easy to do. Continue
	rinsing. Immediately call a POISON CENTER/doctor.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Component		Classification	Concentration
Pyruvic acid			
CAS-No. EC-No.	127-17-3 204-824-3	Skin Corr. 1B; Eye Dam. 1; H314, H318	>= 1 - < 5 %
Calcium chloride dihydrate			
CAS-No. EC-No.	10035-04-8 600-075-5	Eye Irrit. 2A; H319	>= 1 - < 5 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

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

If inhaled

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.Continue rinsing eyes during transport to hospital.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Sigma - L4386

Page 2 of 8



4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

- **5.2** Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Hydrogen chloride gas, Potassium oxides, Sodium oxides, Calcium oxide
- **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.
- 5.4 Further information No data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

- **6.2 Environmental precautions** Do not let product enter drains.
- **6.3 Methods and materials for containment and cleaning up** Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- **6.4 Reference to other sections** For disposal see section 13.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 Avoid contact with skin and eyes. Avoid formation of dust and aerosols.Further processing
 of solid materials may result in the formation of combustible dusts. The potential for
 combustible dust formation should be taken into consideration before additional processing
 occurs.
 Provide appropriate exhaust ventilation at places where dust is formed.
 For precautions see section 2.2.
- **7.2** Conditions for safe storage, including any incompatibilities Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature 2 - 8 °C Storage class (TRGS 510): 11: Combustible Solids

Sigma - L4386

Page 3 of 8



7.3 Specific end use(s)

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

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Full contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

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

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection,

Sigma - L4386

Page 4 of 8



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).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

	•	•	
a)	Appearance	Form: solid	
b)	Odour	No data available	
c)	Odour Threshold	No data available	
d)	рН	No data available	
e)	Melting point/freezing point	No data available	
f)	Initial boiling point and boiling range	No data available	
g)	Flash point	()No data available	
h)	Evaporation rate	No data available	
i)	Flammability (solid, gas)	No data available	
j)	Upper/lower flammability or explosive limits	No data available	
k)	Vapour pressure	No data available	
I)	Vapour density	No data available	
m)	Relative density	No data available	
n)	Water solubility	No data available	
0)	Partition coefficient: n-octanol/water	No data available	
p)	Auto-ignition temperature	No data available	
q)	Decomposition temperature	No data available	
r)	Viscosity	No data available	
s)	Explosive properties	No data available	
t)	Oxidizing properties	No data available	
Other safety information			

No data available

Sigma - L4386

9.2

Page 5 of 8



SECTION 10: Stability and reactivity

- **10.1 Reactivity** No data available
- **10.2** Chemical stability Stable under recommended storage conditions.
- 10.3 Possibility of hazardous reactions No data available
- **10.4** Conditions to avoid No data available
- **10.5** Incompatible materials Strong oxidizing agents

10.6 Hazardous decomposition products

Other decomposition products - No data available Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Oxides of phosphorus, Hydrogen chloride gas, Potassium oxides, Sodium oxides, Calcium oxide

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Dermal: No data available

No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitisation No data available

Germ cell mutagenicity No data available

Carcinogenicity

- No component of this product present at levels greater than or equal to 0.1% is IARC: 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 NTP: identified as a known or anticipated carcinogen by NTP.
- No component of this product present at levels greater than or equal to 0.1% is OSHA: on OSHA's list of regulated carcinogens.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure No data available

Sigma - L4386

Page 6 of 8



Specific target organ toxicity - repeated exposure No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

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

SECTION 12: Ecological information

12.1 Toxicity

No data available

- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available
- 12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
- 12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

Sigma - L4386

Page 7 of 8



SECTION 15: Regulatory information

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components Sodium chloride	CAS-No. 7647-14-5	Revision Date
Galactose	59-23-4	
Pyruvic acid	127-17-3	
L-Arginine	74-79-3	

SECTION 16: Other information

Further information

Copyright 2018 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Version: 6.2

Revision Date: 06/17/2019

Print Date: 06/29/2019

Sigma - L4386

Page 8 of 8

