

SAFETY DATA SHEET

Version 6.32
Revision Date 02/20/2025
Print Date 02/21/2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Large Scale Metabolite Library

Product Number : LSMLS
Brand : Sigma

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

Identified uses : Laboratory chemicals, Synthesis of substances

Uses advised against : The product is being supplied under the TSCA R&D Exemption (40 CFR Section 720.36). It is the recipient's responsibility to comply with the requirements of the R&D exemption. The product may not be used for a non-exempt commercial purpose under TSCA unless appropriate consent is granted in writing by MilliporeSigma.

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-
527-3887 CHEMTREC (International) 24
Hours/day; 7 Days/week

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

This is a summary SDS for a kit. For the full SDS for each of the components listed in section 16 please visit our website.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 1), H310
Skin corrosion (Category 1), H314
Serious eye damage (Category 1), H318, EUH071
Respiratory sensitization (Category 1), H334
Skin sensitization (Category 1), H317
Germ cell mutagenicity (Category 2), H341
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 1A), H360
Effects on or via lactation, H362
Specific target organ toxicity - single exposure (Category 1), Immune system, H370
Specific target organ toxicity - repeated exposure (Category 1), Blood, Thyroid, Cardio-vascular system, Kidney, H372
Specific target organ toxicity - repeated exposure, Oral (Category 1), H372
Specific target organ toxicity - repeated exposure (Category 2), H373
Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Respiratory system, H373
Short-term (acute) aquatic hazard (Category 1), H400
Long-term (chronic) aquatic hazard (Category 1), H410

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 Statements

H302	Harmful if swallowed.
H310 + H330	Fatal in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.
H370	Causes damage to organs (Immune system).
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
H372	Causes damage to organs (Blood, Thyroid, Cardio-vascular system, Kidney) through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.

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H373	May cause damage to organs (Respiratory system) through prolonged or repeated exposure if inhaled.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust.
P262	Do not get in eyes, on skin, or on clothing.
P263	Avoid contact during pregnancy and while nursing.
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 must not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P280	Wear protective gloves, protective clothing, eye protection and face protection.
P284	Wear respiratory protection.
P301 + P312 + P330	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
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/ doctor.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.
P361 + P364	Take off immediately all contaminated clothing and wash it before reuse.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

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

SECTION 3: Composition/information on ingredients

Refer to component SDS

SECTION 4: First aid measures

Refer to component SDS

SECTION 5: Firefighting measures

Refer to component SDS

SECTION 6: Accidental release measures

Refer to component SDS

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities**Storage conditions**

Keep container tightly closed in a dry and well-ventilated place.

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage stability Recommended storage temperature
-20 °C

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

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

Refer to component SDS

SECTION 9: Physical and chemical properties

Refer to component SDS

SECTION 10: Stability and reactivity

Refer to component SDS

SECTION 11: Toxicological information

Refer to component SDS

SECTION 12: Ecological information

Refer to component SDS

SECTION 13: Disposal considerations

Refer to component SDS

SECTION 14: Transport information**DOT (US)**

UN number: 3316 Class: 9 Packing group: II

Proper shipping name: Chemical kits
Poison Inhalation Hazard: No

IMDG

UN number: 3316 Class: 9 Packing group: II EMS-No: F-A, S-P

Proper shipping name: CHEMICAL KIT

IATA

UN number: 3316 Class: 9 Packing group: II

Proper shipping name: Chemical kit

SECTION 15: Regulatory information

SARA 311/312 : Acute Health Hazard

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The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

**Millipore
Sigma**

SECTION 16: Other information**Kit Components:**

LSMLS Plate 1 (Water Soluble)	Sigma	LSMLS01	Skin Irrit. 2; Eye Dam. 1; Carc. 2; Repr. 2; STOT RE 2; H315, H318, H351, H361, H373
LSMLS Plate 2 (Water Soluble)	Sigma	LSMLS02	Acute Tox. 4; Acute Tox. 2; Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Repr. 1B; STOT SE 3; STOT RE 2; H302, H315, H317, H318, H330, H334, H335, H341, H360, H373
LSMLS Plate 3 (Water Soluble)	Sigma	LSMLS03	Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; STOT RE 2; Aquatic Acute 2; Aquatic Chronic 2; H315, H317, H318, H334, H373, H411
LSMLS Plate 4 (Water Soluble)	Sigma	LSMLS04	Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; Repr. 1B; STOT SE 1; STOT RE 2; H315, H317, H318, H360, H370, H373
LSMLS Plate 5 (Water Soluble)	Sigma	LSMLS05	Acute Tox. 4; Skin Corr. 1; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1A; STOT SE 3; STOT RE 1; STOT RE 2; Aquatic Acute 3; Aquatic Chronic 3; H302, H314, H317, H335, H341, H350, H360, H372, H373, H412
LSMLS Plate 6 (Lipophilic)	Sigma	LSMLS06	Acute Tox. 1; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 2; Repr. 2; STOT RE 2; Aquatic Acute 2; Aquatic Chronic 2; H310, H315, H317, H318, H341, H351, H361, H373, H411
LSMLS Plate 7 (Lipophilic)	Sigma	LSMLS07	Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1A; Lact. ; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H315, H317, H318, H332, H341, H350, H360, H362, H372, H372, H410

Further information

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The information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. 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 information is believed to be correct but is not exhaustive and will be used solely as a guideline, which is based on current knowledge of the chemical substance or mixture and is applicable to appropriate safety precautions for the product. 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.

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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.

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Kit Components:

LSMLS Plate 1 (Water Soluble)					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS01		Danger	<p>Causes skin irritation.</p> <p>Causes serious eye damage.</p> <p>Suspected of causing cancer.</p> <p>Suspected of damaging fertility or the unborn child.</p> <p>May cause damage to organs (Kidney, Liver, Blood) through prolonged or repeated exposure if swallowed.</p>	<p>Obtain special instructions before use. IF ON SKIN: Wash with plenty of soap and water. Store locked up. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. 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/ doctor. Do not breathe dust. IF exposed or concerned: Get medical advice/ attention. Wash skin thoroughly after handling. If skin irritation occurs: Get medical</p>	

				advice/ attention. Wear protective gloves/ protective clothing/ eye protection/ face protection. Take off contaminated clothing and wash before reuse.	
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LSMLS Plate 2 (Water Soluble)

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS02		Danger	<p>Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Fatal if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. May damage fertility or the unborn child. May cause damage to organs (thymus) through prolonged or repeated exposure.</p>	<p>Obtain special instructions before use. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF ON SKIN: Wash with plenty of soap and water. Store locked up. Do not breathe dust. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call</p>	

				<p>a POISON CENTER/ doctor. Wash skin thoroughly after handling. 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/ doctor. Do not eat, drink or smoke when using this product. IF exposed or concerned: Get medical advice/ attention. Use only outdoors or in a well-ventilated area. If skin irritation or rash occurs: Get medical advice/ attention. Contaminated work clothing must not be allowed out of the workplace. If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. Wear protective gloves/ protective clothing/ eye protection/ face protection. Take off contaminated clothing and</p>	
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				wash before reuse. Wear respiratory protection.	
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LSMLS Plate 3 (Water Soluble)

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS03		Danger	<p>Causes skin irritation.</p> <p>May cause an allergic skin reaction.</p> <p>Causes serious eye damage.</p> <p>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>May cause damage to organs through prolonged or repeated exposure.</p> <p>Toxic to aquatic life with long lasting effects.</p>	<p>Do not breathe dust. IF ON SKIN: Wash with plenty of soap and water. Dispose of contents/ container to an approved waste disposal plant. Wash skin thoroughly after handling. IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. Contaminated work clothing must not be allowed out of the workplace. 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/ doctor. Avoid release to the environment. If skin irritation or rash occurs: Get medical advice/</p>	

				attention. Wear protective gloves/ eye protection/ face protection. If experiencing respiratory symptoms: Call a POISON CENTER/ doctor. In case of inadequate ventilation wear respiratory protection. Take off contaminated clothing and wash before reuse. Collect spillage.	
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LSMLS Plate 4 (Water Soluble)


Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS04		Danger	<p>Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility or the unborn child. Causes damage to organs (Immune system). May cause damage to organs (thymus) through prolonged or repeated exposure.</p>	<p>Obtain special instructions before use. IF ON SKIN: Wash with plenty of soap and water. Store locked up. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call</p>	

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				<p>a POISON CENTER/ doctor. Do not breathe dust. IF exposed: Call a POISON CENTER or doctor/ physician. Wash skin thoroughly after handling. If skin irritation or rash occurs: Get medical advice/ attention. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>	
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LSMLS Plate 5 (Water Soluble)

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS05		Danger	<p>Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. Suspected of causing genetic defects.</p>	<p>Obtain special instructions before use. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/</p>	

			<p>May cause cancer.</p> <p>May damage fertility or the unborn child.</p> <p>Causes damage to organs (Blood) through prolonged or repeated exposure.</p> <p>May cause damage to organs through prolonged or repeated exposure.</p> <p>Harmful to aquatic life with long lasting effects.</p>	<p>container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood.</p> <p>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Do not breathe dust. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash skin thoroughly after handling.</p> <p>IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Do not eat, drink or smoke when using this product. 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/ doctor. Use only outdoors or in a</p>	
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				<p>well-ventilated area. IF exposed or concerned: Get medical advice/ attention. Contaminated work clothing must not be allowed out of the workplace. If skin irritation or rash occurs: Get medical advice/ attention. Avoid release to the environment. Wash contaminated clothing before reuse. Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>	
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LSMLS Plate 6 (Lipophilic)

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS06		Danger	<p>Fatal in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause</p>	<p>Obtain special instructions before use. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. Store locked up. Dispose of contents/ container to an approved waste disposal plant. Do not handle</p>	

			<p>damage to organs (Respiratory system) through prolonged or repeated exposure if inhaled. Toxic to aquatic life with long lasting effects.</p>	<p>until all safety precautions have been read and understood. IF ON SKIN: Wash with plenty of soap and water. Do not breathe dust. 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/ doctor. Do not get in eyes, on skin, or on clothing. IF exposed or concerned: Get medical advice/ attention. Wash skin thoroughly after handling. If skin irritation or rash occurs: Get medical advice/ attention. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Contaminated work clothing must not be allowed out of the workplace. Collect spillage. Avoid release to</p>	
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				the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.	
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LSMLS Plate 7 (Lipophilic)

Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - LSMLS07		Danger	<p>Causes skin irritation.</p> <p>May cause an allergic skin reaction.</p> <p>Causes serious eye damage.</p> <p>Harmful if inhaled.</p> <p>Suspected of causing genetic defects.</p> <p>May cause cancer.</p> <p>May damage fertility or the unborn child.</p> <p>May cause harm to breast-fed children.</p> <p>Causes damage to organs through prolonged or repeated exposure if swallowed.</p> <p>Causes damage to organs (Thyroid, Cardio-vascular system, Kidney) through prolonged or repeated exposure.</p> <p>Very toxic to aquatic life with long lasting effects.</p>	<p>Obtain special instructions before use. IF ON SKIN: Wash with plenty of soap and water. Store locked up. Dispose of contents/ container to an approved waste disposal plant. Do not handle until all safety precautions have been read and understood. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. Do not breathe mist or vapors. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call</p>	

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				<p>a POISON CENTER/ doctor. Avoid contact during pregnancy/ while nursing. IF exposed or concerned: Get medical advice/ attention. Wash skin thoroughly after handling. If skin irritation or rash occurs: Get medical advice/ attention. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Use only outdoors or in a well-ventilated area. Collect spillage. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.</p>	
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