

## SAFETY DATA SHEET

Version 6.2 Revision Date 11/28/2020 Print Date 03/02/2021

## 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

## 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 : +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 MSDS for a kit. For the full MSDS 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)

Flammable liquids (Category 2), H225 Corrosive to Metals (Category 1), H290

Acute toxicity, Oral (Category 2), H300

Acute toxicity, Inhalation (Category 2), H330

Acute toxicity, Initiation (Category 2), 1133 Acute toxicity, Dermal (Category 1), H310

Skin corrosion (Category 1A), H314

Serious eye damage (Category 1), H318

Respiratory sensitization (Category 1), H334

Skin sensitization (Category 1), H317

Germ cell mutagenicity (Category 2), H341

Carcinogenicity (Category 1A), H350

Reproductive toxicity (Category 1B), H360



Specific target organ toxicity - single exposure (Category 1), H370

Specific target organ toxicity - single exposure, Oral (Category 1), Central nervous system,

Blood, H370

Specific target organ toxicity - single exposure, Oral (Category 2), Respiratory system,

H371

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Specific target organ toxicity - repeated exposure (Category 1), H372 Specific target organ toxicity - repeated exposure (Category 2), H373

Aspiration hazard (Category 1), H304

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 statement(s)	
H225	Highly flammable liquid and vapor.
H290	May be corrosive to metals.
H300 + H310 + H330	Fatal if swallowed, in contact with skin or if inhaled.
H304	May be fatal if swallowed and enters airways.
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.
H370	Causes damage to organs.
H370	Causes damage to organs (Central nervous system, Blood) if swallowed.
H371	May cause damage to organs (Respiratory system) if swallowed.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary statement(	(s)
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
P233	Keep container tightly closed.
P234	Keep only in original container.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.



P262	Do not get in eyes, on skin, or on clothing.
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
P284	protection.
	Wear respiratory protection.
P301 + P310 + P330	IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P350 + P310	IF ON SKIN: Gently wash with plenty of soap and water.
	Immediately call a POISON CENTER or doctor/ physician.
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 +	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.
P307 + P311	IF exposed: Call a POISON CENTER or doctor/ physician.
P308 + P311	IF exposed or concerned: Call a POISON CENTER/ doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant
	foam to extinguish.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner
	liner.
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 MSDS

## **SECTION 4: First aid measures**

Refer to component MSDS



#### **SECTION 5: Firefighting measures**

Refer to component MSDS

#### **SECTION 6: Accidental release measures**

Refer to component MSDS

## **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

#### Advice on safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

## Advice on protection against fire and explosion

Use explosion-proof equipment. **Advice on protection against fire and explosion**Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### **Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

#### Storage stability

Recommended storage temperature -20 °C

Storage class (TRGS 510): 3: Flammable liquids

#### 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 MSDS

## **SECTION 9: Physical and chemical properties**

Refer to component MSDS

#### **SECTION 10: Stability and reactivity**

Refer to component MSDS



## **SECTION 11: Toxicological information**

Refer to component MSDS

## **SECTION 12: Ecological information**

Refer to component MSDS

## **SECTION 13: Disposal considerations**

Refer to component MSDS

## **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 Hazards

Acute Health Hazard, Chronic Health Hazard

## SECTION 16: Other information

Kit Components:

Large Scale Metabolite Sigma LSMLS-01 Flam. Liq. 3; Acute Tox. 3; Skin

Library Plate 1

Irrit. 2; Eye Dam. 1; Skin Sens. 1; Carc. 2; Repr. 2; STOT SE 3; STOT RE 2; Aquatic Acute 2; Aquatic Chronic 2; H226, H301 + H311, H315, H317, H318, H335, H351, H361, H373, H373,

H411

Large Scale Metabolite Sigma LSMLS-02 Flam. Liq. 2; Met. Corr. 1; Acute

Library Plate 2

Tox. 2; Skin Corr. 1B; Eye Dam.



			1; Resp. Sens. 1; Skin Sens. 1; Carc. 2; STOT SE 1; STOT SE 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H225, H290, H300 + H310 + H330, H314, H317, H334, H335, H351, H370, H373, H410
Large Scale Metabolite Library Plate 3	Sigma	LSMLS-03	Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; STOT SE 1; STOT SE 3; H302 + H312 + H332, H314, H317, H334, H335, H370
Large Scale Metabolite Library Plate 4	Sigma	LSMLS-04	Flam. Liq. 3; Acute Tox. 3; Acute Tox. 2; Skin Corr. 1A; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; STOT SE 1; STOT SE 3; STOT RE 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H226, H301 + H331, H310, H314, H317, H335, H341, H350, H360, H370, H372, H372, H373, H410
Large Scale Metabolite Library Plate 5	Sigma	LSMLS-05	Flam. Liq. 4; Acute Tox. 4; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Repr. 2; STOT SE 3; Aquatic Acute 2; H227, H302 + H332, H311, H314, H317, H335, H341, H361, H401
Large Scale Metabolite Library Plate 6	Sigma	LSMLS-06	Flam. Liq. 2; Met. Corr. 1; Acute Tox. 2; Acute Tox. 3; Acute Tox. 1; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 2; Repr. 2; STOT SE 1; STOT SE 2; STOT SE 3; Aquatic Acute 1; Aquatic Chronic 1; H225, H290, H300 + H310, H314, H317, H331, H335, H341, H351, H361,
Large Scale Metabolite Library Plate 7	Sigma	LSMLS-07	H370, H371, H410 Flam. Liq. 4; Acute Tox. 3; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; STOT SE 3; STOT RE 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H227, H301 + H311, H304, H314, H350, H360, H372, H410

## **Further information**

Copyright 2020 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.

Copyright 2020 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: 11/28/2020 Print Date: 03/02/2021





# **Kit Components:**

Large Scale Met	abolite Lib	rary Plate 1			
	ictogram	Signal	Hazard	Precautionary	Supplemental
identifier		word	Statements	Statements	information
identifier Sigma - LSMLS-01		Danger	Flammable liquid and vapor. Toxic if swallowed or in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. May cause damage to organs (/\$/*_2ORG_RE P_ORA/\$/) through prolonged or repeated exposure if swallowed. Toxic to aquatic life with long lasting effects.	Obtain special instructions before use. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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 (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Store in a well-ventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF INHALED: Remove person to fresh air and keep comfortable for	information

Sigma - LSMLS Page 8 of 24



				CENTER/ doctor	
				if you feel	
				unwell. Store	
				locked up.	
				Keep container	
				tightly closed. 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.	
				_	
				Ground/bond	
				container and	
				receiving	
				equipment. IF	
				exposed or	
				concerned: Get	
				medical advice/	
				attention. Use	
				explosion-proof	
				electrical/	
				ventilating/	
				lighting/	
				equipment. If	
				skin irritation or	
				rash occurs: Get	
				medical advice/	
				attention. Use	
				only non-	
				sparking tools.	
				Take off	
				contaminated	
				clothing and	
				wash before	
				reuse. Take	
				precautionary	
				measures	
				against static	
				discharge. In	
				case of fire: Use	
				dry sand, dry	
				chemical or	
				alcohol-resistant	
				foam to	
				extinguish. Do	
				not breathe	
				dust/ fume/	
Sigma - LSMLS	1	<u> </u>	1		1
Jigilia - LJIILJ					Page 9 of 24



	gas/ mist/	
	vapors/ spray.	
	Collect spillage	·.
	Wash skin	
	thoroughly after	er
	handling. Do	
	not eat, drink	
	smoke when	
	using this	
	product. Us	a
	only outdoors	
	in a well-	
	ventilated area	1_
	Contaminated	
	work clothing	
	must not be	
	allowed out of	
	the workplace.	
	Avoid release t	
	the	.
	environment.	
	Wear protectiv	
	gloves/	6
	protective	
	clothing/ eye	
	protection/ fac	c
	protection.	

	brary Plate	2	T	1
Pictogram	Signal	Hazard	Precautionary	Supplemental
	word	Statements	Statements	information
	Danger	Highly	Obtain special	
		·		
		-		
			,	
		•		
			· ·	
X				
<b>(!)</b>			-	
		,	•	
		-	-	
		_	•	
		-	•	
		_		
			,	
		-		
		' '		
	Pictogram	Pictogram Signal word	word Statements  Danger Highly	Pictogram  Signal word  Statements  Danger  Highly flammable liquid and vapor. May be corrosive to metals. Fatal if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.  Precautionary Statements  Obtain special instructions before use. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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 SWALLOWED:

Sigma - LSMLS Page 10 of 24



		causing cancer. Causes damage to organs. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.	NOT induce vomiting. Store in a well- ventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. Store locked up. Keep container tightly closed. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Store in corrosive resistant container with a resistant inner liner. Keep only in original container. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Ground/bond container and receiving equipment. IF IN EYES: Rinse cautiously with water for	
several minutes. Remove contact lenses, if			water for several minutes. Remove contact	



	present and	
	easy to do.	
	Continue	
	rinsing.	
	Immediately call	
	a POISON	
	CENTER/ doctor.	
	Use explosion-	
	proof electrical/	
	ventilating/	
	lighting/	
	equipment. IF	
	exposed: Call a	
	POISON CENTER	
	or doctor/	
	physician. Use	
	only non-	
	sparking tools.	
	If skin irritation	
	or rash occurs:	
	Get medical	
	advice/	
	attention.	
	Take	
	precautionary	
	measures	
	against static	
	discharge. Take	
	off contaminated	
	clothing and	
	wash before	
	reuse. Do not	
	breathe dust/	
	fume/ gas/	
	mist/ vapors/	
	spray. In case of	
	fire: Use dry	
	sand, dry	
	chemical or	
	alcohol-resistant	
	foam to	
	extinguish. Do	
	not get in eyes,	
	on skin, or on	
	clothing. Absorb	
	spillage to	
	prevent material	
	damage.	
	Wash skin	
	thoroughly after	
	handling. Collect	
	spillage. Do	
	not eat, drink or	
	smoke when	
	using this	
Sigma - LSMLS		Page 12 of 24

Sigma - LSMLS Page 12 of 24



product. Use
only outdoors or
in a well-
ventilated area.
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.
Wear respiratory
protection.

Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
dentifier		word	Statements	Statements	information
Sigma - LSMLS-03		Danger	Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Causes damage to organs.	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. 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. Wash skin thoroughly after handling. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Do not eat, drink or smoke when using this product. IF ON	

Sigma - LSMLS Page 13 of 24



		Take off	
		immediately all	
		contaminated	
		clothing. Rinse	
		skin with water/	
		shower. Use	
		only outdoors or	
		in a well-	
		ventilated area.	
		IF INHALED:	
		Remove person	
		to fresh air and	
		keep	
		comfortable for	
		breathing.	
		Immediately call	
		a POISON	
		CENTER/ doctor.	
		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.	
		Wear protective	
		gloves/	
		protective	
		clothing/ eye	
		protection/ face	
		protection. IF	
		exposed: Call a	
		POISON CENTER	
		or doctor/	
		physician. In	
		case of	
		inadequate	
		ventilation wear	
		respiratory	
		protection. If	
		skin irritation or	
		rash occurs: Get	
		medical advice/	
		attention.	
Sigma - LSMLS			Page 14 of 24

Sigma - LSMLS Page 14 of 24



Wash contaminated	
clothing before	
reuse.	

Large Scale M	letabolite Lil	orary Plate	4		
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		word	Statements	Statements	information
Sigma -	1	Danger	Flammable	Obtain special	
LSMLS-04			liquid and vapor.	instructions	
			Toxic if	before use. IF	
			swallowed or if	SWALLOWED:	
			inhaled. Fatal in	Immediately call	
			contact with	a POISON	
	X		skin. Causes	CENTER/ doctor.	
	(工工)		severe skin	Rinse mouth.	
	X		burns and eye	Store in a well-	
	(!)		damage. May	ventilated place.	
			cause an allergic skin reaction.	Keep container	
			May cause	tightly closed. Dispose of	
			respiratory	contents/	
			irritation.	container to an	
			Suspected of	approved waste	
			causing genetic	disposal plant.	
			defects. May	Do not handle	
			cause cancer.	until all safety	
			May damage	precautions	
			fertility or the	have been read	
			unborn child.	and understood.	
			Causes damage	IF SWALLOWED:	
			to organs.	Rinse mouth. Do	
			Causes damage	NOT induce	
			to organs	vomiting. Store	
			(/\$/*_ORGAN_R	in a well-	
			EPEAT/\$/)	ventilated place.	
			through	Keep cool.	
			prolonged or	Keep away from	
			repeated exposure.	heat/ sparks/ open flames/	
			Causes damage	hot surfaces. No	
			to organs	smoking. IF ON	
			(/\$/*_ORG_REP	SKIN: Gently	
			_INHA/\$/)	wash with plenty	
			through	of soap and	
			prolonged or	water.	
			repeated	Immediately call	
			exposure if	a POISON	
			inhaled. May	CENTER or	
			cause damage	doctor/	
			to organs	physician. Store	
			(/\$/*_20RGAN_	locked up.	
			REPEAT/\$/)	Keep container	
			through	tightly closed. IF	
Sigma - LSMLS			prolonged or	ON SKIN (or	

Sigma - LSMLS Page 15 of 24



		repeated	hair): Take off	
		exposure. Very	immediately all	
		toxic to aquatic	contaminated	
		life with long	clothing. Rinse	
		lasting effects.	skin with water/	
		lasting effects.	shower.	
			Ground/bond	
			container and	
			receiving	
			equipment. IF	
			INHALED:	
			Remove person	
			to fresh air and	
			keep	
			comfortable for	
			breathing.	
			Immediately call	
			a POISON	
			CENTER/ doctor.	
			Use explosion-	
			proof electrical/	
			ventilating/	
			lighting/	
			equipment. 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 non-	
			sparking tools.	
			IF exposed: Call	
			a POISON	
			CENTER or	
			doctor/	
			physician.	
			Take	
			precautionary	
			measures	
			against static	
			discharge. If	
			skin irritation or	
			rash occurs: Get	
			medical advice/	
			attention. Do	
			not breathe	
	<u> </u>		dust/ fume/	
Sigma - LSMLS				Dags 16 of 24

Sigma - LSMLS Page 16 of 24



gas/ mist/ vapors/ spray.  Take off contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
Take off contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
wash before reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
reuse. Do not get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
get in eyes, on skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
skin, or on clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
clothing. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
sand, dry chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
chemical or alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or
thoroughly after handling. Collect spillage. Do not eat, drink or
handling. Collect spillage. Do not eat, drink or
spillage. Do not eat, drink or
not eat, drink or
l amala whan
smoke when
using this
product. Use
only outdoors or
in a well-
ventilated area.
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.

Large Scale Metabolite Library Plate 5						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		word	Statements	Statements	information	
Sigma -		Danger	Combustible	Obtain special		
LSMLS-05	335		liquid. Harmful if	instructions		
			swallowed or if	before use. IF		
			inhaled. Toxic in	SWALLOWED:		
	X		contact with	Call a POISON		
	(工事)		skin. Causes	CENTER/ doctor		
	X		severe skin	if you feel		
			burns and eye	unwell. Rinse		
			damage. May	mouth. Store in		
			cause an allergic	a well-ventilated		

Sigma - LSMLS Page 17 of 24



		skin reaction.	place. Keep	
		May cause	container tightly	
		respiratory	closed. Dispose	
		irritation.	of contents/	
		Suspected of	container to an	
		_		
		causing genetic defects.	approved waste	
			disposal plant. Do not handle	
		Suspected of	until all safety	
		damaging fertility or the	precautions	
		unborn child.	have been read	
		Toxic to aquatic	and understood.	
		life.	IF SWALLOWED:	
			Rinse mouth. Do	
			NOT induce	
			vomiting. Store	
			in a well-	
			ventilated place.	
			Keep cool.	
			Keep away from	
			heat/ sparks/	
			open flames/	
			hot surfaces. No	
			smoking. IF ON	
			SKIN (or hair):	
			Take off	
			immediately all	
			contaminated	
			clothing. Rinse	
			skin with water/	
			shower. Store	
			locked up.	
			Avoid breathing	
			dust/ fume/	
			gas/ mist/	
			vapors/ spray. IF INHALED:	
			Remove person	
			to fresh air and	
			keep	
			comfortable for	
			breathing.	
			Immediately call	
			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	
Sigma - LSMLS				Dage 19 of 24

Sigma - LSMLS Page 18 of 24



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.
Take off
contaminated
clothing and
wash before
reuse. Avoid
release to the
environment. In
case of fire: Use
dry sand, dry
chemical or
alcohol-resistant
foam to
extinguish.
Wear protective
gloves/
protective
clothing/ eye
protection/ face
protection.

Large Scale Metabolite Library Plate 6							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		word	Statements	Statements	information		
Sigma -		Danger	Highly	Obtain special			
LSMLS-06			flammable liquid	instructions			
			and vapor. May	before use. IF			
			be corrosive to	SWALLOWED:			
	_		metals. Fatal if	Immediately call			

Sigma - LSMLS Page 19 of 24





swallowed or in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Toxic if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs (/\$/\*\_ORG\_SIN G\_ORAL/\$/) if swallowed. May cause damage to organs (/\$/\*\_20RG\_SI NG\_ORA/\$/) if swallowed. Very toxic to aquatic life with long lasting effects.

a POISON CENTER/ doctor. Rinse mouth. Store in a wellventilated 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 SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store in a wellventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. Store locked up. Keep container tightly closed. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Store in corrosive resistant container with a resistant inner liner. Keep only in original

container. IF

Sigma - LSMLS Page 20 of 24

		INHALED:	
		Remove person	
		to fresh air and	
		keep	
		comfortable for	
		breathing.	
		Immediately call	
		a POISON	
		CENTER/ doctor.	
		Ground/bond	
		container and	
		receiving	
		equipment. 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 explosion-	
		proof electrical/	
		ventilating/	
		lighting/	
		equipment. IF	
		exposed: Call a	
		POISON CENTER	
		or doctor/	
		physician. Use	
		only non-	
		sparking tools.	
		IF exposed or	
		concerned: Call	
		a POISON	
		CENTER/ doctor.	
		Take	
		precautionary	
		measures	
		against static	
		discharge. If	
		skin irritation or	
		rash occurs: Get	
		medical advice/	
		attention. Do	
		not breathe	
		dust/ fume/	
		gas/ mist/	
		vapors/ spray.	
		Take off	
Sigma - LSMLS			Page 21 of 24

Sigma - LSMLS Page 21 of 24



		$\overline{}$
	contaminated	
	clothing and	
	wash before	
	reuse. Do not	
	get in eyes, on	
	skin, or on	
	clothing. In case	
	of fire: Use dry	
	sand, dry	
	chemical or	
	alcohol-resistant	
	foam to	
	extinguish.	
	Wash skin	
	thoroughly after	
	handling. Absorb	
	spillage to	
	prevent material	
	damage. Do	
	not eat, drink or	
	smoke when	
	using this	
	product. Collect	
	spillage. Use	
	only outdoors or	
	in a well-	
	ventilated area.	
	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.	
<u> </u>	I In a service of the	

Large Scale	Metabolite Li	brary Plate	7		
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		word	Statements	Statements	information
Sigma -		Danger	Combustible	Obtain special	
LSMLS-07			liquid. Toxic if	instructions	
			swallowed or in	before use. IF	
			contact with	SWALLOWED:	
	X		skin. May be	Immediately call	
	<u> </u>		fatal if	a POISON	
			swallowed and	CENTER/ doctor.	
			enters airways.	Rinse mouth.	
			Causes severe	Store in a well-	
			skin burns and	ventilated place.	

Sigma - LSMLS Page 22 of 24



*

eye damage. May cause an allergic skin reaction. Fatal if inhaled. May cause respiratory irritation. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure if swallowed. Very toxic to aquatic life with long lasting effects.

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 SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store in a wellventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Store locked up. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call 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

Sigma - LSMLS Page 23 of 24

	1
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.	
Take off	
contaminated	
clothing and	
wash before	
reuse. Avoid	
release to the	
environment. In	
case of fire: Use	
dry sand, dry	
chemical or	
alcohol-resistant	
foam to	
extinguish.	
Wear protective	
gloves/	
protective	
clothing/ eye	
protection/ face	
protection, race	
Collect spillage.	
Wear respiratory	
protection.	

