

SAFETY DATA SHEET

Version 8.0
Revision Date 03/04/2021
Print Date 03/04/2021**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Product name : Phytochemical Metabolite Library Of Standards

Product Number : PHYTOMLS
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 :

1.4 Emergency telephoneEmergency Phone # : +(44)-870-8200418 (CHEMTREC (GB))
+(353)-19014670 (CHEMTREC Ireland)
001-803-017-9114 (CHEMTREC India)

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
Acute toxicity, Oral (Category 2), H300
Acute toxicity, Inhalation (Category 2), H330
Acute toxicity, Dermal (Category 1), H310
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318
Respiratory sensitization (Category 1), H334
Skin sensitization (Category 1), H317
Germ cell mutagenicity (Category 1A), H340
Carcinogenicity (Category 1B), H350
Reproductive toxicity (Category 1B), H360
Specific target organ toxicity - single exposure (Category 3), Respiratory system, Central nervous system, H335, H336
Specific target organ toxicity - repeated exposure (Category 1), H372
Aspiration hazard (Category 1), H304
Short-term (acute) aquatic hazard (Category 1), H400

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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.
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.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H372	Causes 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.
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 protection.
P284	Wear respiratory protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
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

P304 + P340 + P310	clothing. Rinse skin with water/ shower. 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.
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.
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.
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

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

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. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

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

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Proper shipping name: Chemical kits
Poison Inhalation Hazard: No

IMDG

UN number: 3316 Class: 9
Proper shipping name: CHEMICAL KIT

Packing group: II EMS-No: F-A, S-P

IATA

UN number: 3316 Class: 9
Proper shipping name: Chemical kit

Packing group: II

SECTION 15: Regulatory information

SECTION 16: Other information

Kit Components:

Phytochemical Metabolite Library Of Standards Plate 1 (Ethanol Soluble)	PHYTOMLS- 01-1EA	PHYTOMLS-01	Flam. Liq. 3; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Carc. 1B; Repr. 1B; STOT SE 3; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H226, H300 + H330, H304, H311, H314, H317, H334, H335, H341, H350, H360, H410
Phytochemical Metabolite Library Of Standards Plate 2 (Ethanol Soluble)	PHYTOMLS- 02-1EA	PHYTOMLS-02	Flam. Liq. 3; Acute Tox. 2; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 2; Carc. 2; STOT SE 3; STOT RE 1; Asp. Tox. 1; Aquatic Acute 1; Aquatic Chronic 1; H226, H300 + H310 + H330, H304, H314, H317, H335, H341, H351, H372, H410
Phytochemical Metabolite Library Of Standards Plate 3 (Water Soluble)	PHYTOMLS- 03-1EA	PHYTOMLS-03	Flam. Liq. 2; Acute Tox. 2; Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Muta. 1A; Carc. 1B; Repr. 2; STOT SE 3; STOT RE 1; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H225, H300 + H330, H311, H314, H317, H335, H340, H350, H361, H372, H373, H410
Phytochemical Metabolite Library Of Standards Plate 4 (Water And Methanol Soluble)	PHYTOMLS- 04-1EA	PHYTOMLS-04	Flam. Liq. 2; Acute Tox. 2; Acute Tox. 1; Skin Corr. 1C; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; Carc. 2; Repr. 2; STOT SE 3; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 2; H225, H300 + H310 + H330, H314, H317, H334, H335, H336, H351, H361, H372, H400, H411

Further information

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.

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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.

Version: 8.0

Revision Date: 03/04/2021

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Kit Components:


Phytochemical Metabolite Library Of Standards Plate 1 (Ethanol Soluble)					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
PHYTOMLS-01-1EA - PHYTOMLS-01		Danger	<p>Flammable liquid and vapor. Fatal if swallowed or if inhaled. May be fatal if swallowed and enters airways. Toxic in contact with skin. 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. Suspected of causing genetic defects. May cause cancer. May damage fertility or the unborn child. Very toxic to aquatic life with long lasting effects.</p>	<p>Obtain special instructions before use. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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: Immediately call a POISON CENTER/ doctor. Rinse mouth. Store in a well-ventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Keep container tightly closed. IF ON SKIN (or hair): Take off immediately all</p>	

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				<p>contaminated clothing. Rinse skin with water/ shower.</p> <p>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 or concerned: Get medical advice/ attention. 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</p>	
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				contaminated clothing and wash before reuse. Wash skin thoroughly after handling. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. 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. Wear respiratory protection.	
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Phytochemical Metabolite Library Of Standards Plate 2 (Ethanol Soluble)					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
PHYTOMLS-02-1EA - PHYTOMLS-02		Danger	Flammable liquid and vapor. Fatal if swallowed, in contact with skin or if inhaled. May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May	Obtain special instructions before use. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Store in a well-ventilated place. Keep container tightly closed. Dispose of contents/ container to an approved waste	


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			<p>cause respiratory irritation. Suspected of causing genetic defects. Suspected of causing cancer. Causes damage to organs through prolonged or repeated exposure if swallowed. Very toxic to aquatic life with long lasting effects.</p>	<p>disposal plant. Do not handle until all safety precautions have been read and understood. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth. Store in a well-ventilated place. Keep cool. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Store locked up. Keep container tightly closed. IF ON SKIN: Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/ physician. Ground/bond container and receiving equipment. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Use explosion-proof electrical/ ventilating/ lighting/ equipment. IF INHALED: Remove person to fresh air and keep</p>	
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				<p>comfortable for breathing. Immediately call a POISON CENTER/ doctor. Use only non-sparking tools. 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. Take precautionary measures against static discharge. IF exposed or concerned: Get medical advice/ attention. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. If skin irritation or rash occurs: Get medical advice/ attention. Do not get in eyes, on skin, or on clothing. Take off contaminated clothing and wash before reuse. Wash skin thoroughly after handling. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. Do not eat, drink or smoke when using this</p>	
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				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. Wear respiratory protection.	
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Phytochemical Metabolite Library Of Standards Plate 3 (Water Soluble)

Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
PHYTOMLS-03-1EA - PHYTOMLS-03		Danger	Highly flammable liquid and vapor. Fatal if swallowed or if inhaled. Toxic in contact with skin. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause respiratory irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs (/\$/*_ORG_REP_ORAL/\$/) through prolonged or repeated exposure if	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: Rinse mouth. Do NOT induce vomiting. Store in a well-ventilated place. Keep cool. Keep away from	


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			<p>swallowed. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.</p>	<p>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. Keep container tightly closed. 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 present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor. Use explosion-proof electrical/ ventilating/ lighting/ equipment. IF exposed or concerned: Get medical advice/ attention. Use only non-sparking tools. If skin irritation or rash occurs: Get medical advice/</p>	
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				<p>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. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or 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. Wear respiratory protection.</p>	
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Phytochemical Metabolite Library Of Standards Plate 4 (Water And Methanol Soluble)					
Product identifier	Pictogram	Signal word	Hazard Statements	Precautionary Statements	Supplemental information
PHYTOMLS-04-1EA - PHYTOMLS-04		Danger	Highly flammable liquid and vapor. Fatal if swallowed, in	Obtain special instructions before use. IF SWALLOWED:	

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			<p>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. May cause drowsiness or dizziness. Suspected of causing cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.</p>	<p>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: 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: 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. Ground/bond container and receiving equipment. IF INHALED: Remove person</p>	
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				<p>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 or concerned: Get medical advice/ attention. 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 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</p>	
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				<p>alcohol-resistant foam to extinguish. Wash skin thoroughly after handling. Collect spillage. Do not eat, drink or 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. Wear respiratory protection.</p>	
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