

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 9.7 Revision Date 02.07.2024 Print Date 04.05.2025

GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1 Product identifiers

Product name : Phytochemical Metabolite Library Of

Standards Plate 3 (Water Soluble)

Product Number : PHYTOMLS03

Brand : Sigma

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

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

Identified uses : Laboratory chemicals, Manufacture of substances

1.3

CHEMIKART

# 1.4 Emergency telephone

Emergency Phone # : 000 800 1007 141 (CHEMTREC)

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

Flammable liquids, (Category 2) H225: Highly flammable liquid and vapor.

Acute toxicity, (Category 2) H300: Fatal if swallowed.

Acute toxicity, (Category 2) H330: Fatal if inhaled.

Acute toxicity, (Category 3) H311: Toxic in contact with skin.

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Skin corrosion, (Sub-category 1B)	H314: Causes severe skin burns and eye damage.
Serious eye damage, (Category 1)	H318: Causes serious eye damage.
Skin sensitization, (Category 1)	H317: May cause an allergic skin reaction.
Germ cell mutagenicity, (Category 1A)	H340: May cause genetic defects.
Carcinogenicity, (Category 1B)	H350: May cause cancer.
Reproductive toxicity, (Category 2)	H361f: Suspected of damaging fertility.
Specific target organ toxicity - single exposure, (Category 3), Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, (Category 1), Peripheral nervous system	H372: Causes damage to organs through prolonged or repeated exposure if swallowed.
Specific target organ toxicity - repeated exposure, (Category 2)	H373: May cause damage to organs through prolonged or repeated exposure.
Specific target organ toxicity - repeated exposure, (Category 2), Blood, Liver, Kidney	H373: May cause damage to organs through prolonged or repeated exposure if swallowed.
Short-term (acute) aquatic hazard, (Category 1)	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, (Category 1)	H410: Very toxic to aquatic life with long lasting effects.

# 2.2 Label elements

# **Labelling according Regulation (EC) No 1272/2008**Pictogram

Signal Word	Danger
Hazard Statements	
H225	Highly flammable liquid and vapor.
H300 + H330	Fatal if swallowed or if inhaled.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.

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H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs (Peripheral nervous system) through prolonged or repeated exposure if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs (Blood, Liver, Kidney) through prolonged or repeated exposure if swallowed.
H410	Very toxic to aquatic life with long lasting effects.
Precautionary Statements	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
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. Remove contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

May cause respiratory irritation.

# Reduced Labeling (<= 125 ml) Pictogram

H335

Signal Word	Danger
Hazard Statements	
H311	Toxic in contact with skin.
H317	May cause an allergic skin reaction.
H340	May cause genetic defects.
H350	May cause cancer.
H372	Causes damage to organs through prolonged or repeated exposure if swallowed.
H314	Causes severe skin burns and eye damage.
H361f	Suspected of damaging fertility.
H300 + H330	Fatal if swallowed or if inhaled.
Precautionary Statements	
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

Sigma- PHYTOMLS03 Page 3 of 49 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue

rinsing.

Supplemental Hazard

Statements

none

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **Ecological information:**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### **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. 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.

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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**

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 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

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#### **SECTION 14: Transport information**

14.1 UN number

ADR/RID: 3316 IMDG: 3316 IATA: 3316

14.2 UN proper shipping name

ADR/RID: CHEMICAL KIT IMDG: CHEMICAL KIT IATA: Chemical kit

14.3 Transport hazard class(es)

ADR/RID: 9 IMDG: 9 IATA: 9

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

Tunnel restriction code : (E)

Further information : No data available

#### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

Refer to component SDS

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

#### **SECTION 16: Other information**

#### **Kit Components:**

Flam. Liq. 3; Acute Tox. 3; Acute

Tox. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Carc. 2; STOT SE 3; Aquatic Chronic 3; H226, H301, H312, H315, H319, H330,

H335, H351, H412 Flam. Liq. 3; H226

Cis-hex-3-en-1-ol

2-Furoic acid Aldrich F20505 Skin Corr. 1C; Eye Dam. 1;

H314

2-Ethylbutyric acid Aldrich 109959 Acute Tox. 3; Skin Irrit. 2; Eye

Irrit. 2; STOT RE 2; H311, H315,

H319, H373

2,4-Dihydroxy-butanoic

acid

2-Acetylpyrazine Aldrich W312606 Skin Irrit. 2; Eye Irrit. 2; STOT

SE 3; H315, H319, H335

2-Amino-1- Skin Irrit. 2; Eye Irrit. 2; STOT

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phenylethanol	C:	A7165	SE 3; H315, H319, H335
1,5-Anhydro-D-sorbitol (s)-3-(allylsulphinyl)-l-alanine	Sigma Sigma-Aldrich	A7165 72805	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
2-Keto-L-gluconate N-Suberoyl glycine Sinigrin	Sigma-Aldrich	52888	
(S)- $(-)$ -2-Methylbutanol	Aldrich	A83407	Flam. Liq. 3; Acute Tox. 4; STOT SE 3; H226, H332, H335,
2- Methyltetrahydrofuran- 3-one	Aldrich	W337307	EUH066 Flam. Liq. 3; Acute Tox. 4; H226, H302
3-Hydroxyisobutyric acid 3-Furoic acid	Aldrich	163392	Skin Irrit. 2; Eye Irrit. 2; H315, H319
2-Methyl-2-pentenoic acid	Aldrich	W319519	Skin Corr. 1B; Eye Dam. 1; H314
Methylmalonic acid	Sigma	M2633	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
2-Picolinic acid			Acute Tox. 4; Eye Dam. 1; H302, H318
Dihydrothymine 3,4-	Aldrich	419370	Skin Irrit. 2; Eye Irrit. 2; STOT
Dihydroxybenzaldehyde 3,5-Dihydroxybenzoic acid	Aldrich	D110000	SE 3; H315, H319, H335 Skin Irrit. 2; Eye Irrit. 2; H315, H319
3-(3',4'- Dihydroxyphenyl)lactic acid sodium salt	Cerilliant	PHY80042	ADT
3,4,5-Trimethoxy-trans- cinnamic acid	Sigma	T4002	Eye Irrit. 2; Skin Sens. 1; H317, H319
Acrylamide	Sigma-Aldrich	01699	Acute Tox. 3; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Muta. 1B; Carc. 1B; Repr. 2; STOT RE 1; H301, H312 + H332, H315, H317, H319, H340, H350, H361f, H372
DL-3-Aminoisobutyric acid	Aldrich	217794	
3-Hydroxyvaleric acid 3-Methylthiopropionic			
acid 4-Hydroxy-3-	Aldrich	659282	Acute Tox. 4; Skin Irrit. 2; Eye
methylbenzoic acid Arecoline			Dam. 1; STOT SE 3; H302, H315, H318, H335 Skin Irrit. 2; Eye Irrit. 2; Muta. 1A; Carc. 2; H315, H319, H340,
4,5-Dihydroorotic acid			H351 Skin Irrit. 2; Eye Irrit. 2; STOT
3-Methylxanthine	Aldrich	M2509	SE 3; H315, H319, H335

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2-Hydroxy-5- methoxybenzoic acid	Aldrich	146188	
Arbutin Amygdalin Cyclohexanone	Sigma Sigma Sigma-Aldrich	A4256 A6005 29135	Acute Tox. 4; H302 Flam. Liq. 3; Acute Tox. 4; Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H226, H302 + H312 + H332, H315, H318, H335
2-Methyl-3-pentanone β-Hydroxyisovaleric acid	Sigma-Aldrich Aldrich	04222 55453	Flam. Liq. 2; H225 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
Cyclohexanecarboxylic acid	Aldrich	101834	Acute Tox. 4; Eye Irrit. 2; H302, H319
Ethyl acetoacetate	Aldrich	10912	
Citramalic acid (+)-a-Terpineol	Sigma-Aldrich	83073	Eye Irrit. 2; H319 Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
Betonicine beta-Glycerophosphoric acid			
L-Canavanine	Sigma	C1625	Acute Tox. 4; H302 + H312 + H332
L-(+)-Ergothioneine 2'-Deoxyinosine 3-Hydroxycoumarin Hydroquinone	Sigma Aldrich Aldrich Katayama	E7521 852279 642673 13-1930	Acute Tox. 4; H302 Acute Tox. 4; Eye Dam. 1; Skin Sens. 1B; Muta. 2; Carc. 2; Aquatic Acute 1; Aquatic Chronic 1; H302, H317, H318, H341, H351, H410
Ethyl pyruvate			Flam. Liq. 3; Skin Corr. 1B; Eye Dam. 1; H226, H314
D-allo-Threonine Isonicotinic acid	Katayama	15-2160 K3125	Eye Irrit. 2; H319
Kojic acid 2,5-Dihydroxybenzoic acid	Sigma Aldrich	149357	Acute Tox. 4; H302
Galactonic acid Glucaric acid L-a- Glycerophosphorylcholin e	Sigma	G5291	
Geniposidic acid Flavin mononucleotide	Sigma Aldrich	SMB00441 CDS020791	Acute Tox. 4; H302
Levulinic acid	Sigma-Aldrich	61380	Acute Tox. 4; Eye Dam. 1; Skin Sens. 1; H302, H317, H318
Nicotinamide (Niacinamide)	Supelco	47865-U	Eye Irrit. 2; H319
3-Hydroxy-2-methyl-4- pyrone	Aldrich	H43407	Acute Tox. 4; H302
S-Methyl-L-cysteine	Sigma-Aldrich	66560	

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Methyl nicotinate	Aldrich	M59203	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
2,5-Dimethyl-4- methoxy-3(2H)-furanone	Sigma-Aldrich	55187	Acute Tox. 4; H302
1,6-Anhydro-β-D- glucose	Aldrich	316555	
Na-Acetyl-L-ornithine scyllo-Inositol Lenticin	Sigma Sigma	A3626 I8132	
Maltotriose Malonyl-CoA	Sigma-Aldrich	63430	
3-Methyl-2-butenoic acid	Sigma-Aldrich	38880	Skin Irrit. 2; Eye Dam. 1; STOT SE 3; H315, H318, H335
2-Methylphenol	Supelco	442361	Acute Tox. 3; Skin Corr. 1B; Eye Dam. 1; Aquatic Chronic 3; H301 + H311, H314, H412
S-(2-Aminoethyl)-L- cysteine			
Tropic acid p-Hydroxymandelic acid S-Carboxymethyl-L-cysteine	Aldrich	T89206	
L-Iditol	Sigma	I6035	
Seleno-L-methionine Pilocarpine	Sigma	S3132	Acute Tox. 3; STOT RE 2; Aquatic Acute 1; Aquatic Chronic 1; H301 + H331, H373, H410 Acute Tox. 2; H300 + H330
Prephenate			
5-Methyluridine	Aldrich	535893	
D-(-)-Salicin	Sigma	S0625	Skin Sens. 1; H317
o-Toluic acid	Aldrich	S459585	
Tyrosol	Cerilliant	PHY80166	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
1-Phenyl-1,2- propanedione	Sigma	P2259	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H315, H319, H335
(S)-(-)-Citronellal	Aldrich	373753	Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H315, H319, H335
Vanillic acid	Aldrich	W398802	,,,
L-Theanine	Sigma	SMB00395	Skin Sens. 1; H317
(–)-Cotinine	Aldrich	284718	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; STOT SE 3; H302, H315,
			H319, H335
1-Methyluric acid	Sigma-Aldrich	67076	
Adenosine			Skin Irrit. 2; Eye Irrit. 2; STOT
phosphosulfate			SE 3; H315, H319, H335
Genistin	Sigma	G0897	
Orientin	Sigma-Aldrich	03810585	
Myricitrin	Sigma-Aldrich	02180585	

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#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM -American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture		Classification procedure:
Flam. Liq.2	H225	Calculation method
Acute Tox.2	H300	Calculation method
Acute Tox.2	H330	Calculation method
Acute Tox.3	H311	Calculation method
Skin Corr.1B	H314	Calculation method
Eye Dam.1	H318	Calculation method
Skin Sens.1	H317	Calculation method
Muta.1A	H340	Calculation method
Carc.1B	H350	Calculation method
Repr.2	H361f	Calculation method
STOT SE3	H335	Calculation method

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STOT RE1	H372	Calculation method
STOT RE2	H373	Calculation method
STOT RE2	H373	Calculation method
Aquatic Acute1	H400	Calculation method
Aquatic Chronic1	H410	Calculation method

#### **Further information**

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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# **Kit Components:**

Furfural Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
		Danger	Flammable liquid and vapor. Toxic if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Fatal if inhaled. May cause respiratory irritation. Suspected of causing cancer. Harmful to aquatic life with long lasting effects.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Avoid release to the environment. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. Wear protective gloves/ protective clothing/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.	

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Cis-hex-3-en-1-ol					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
		Warning	Flammable liquid and vapor.		

Continue rinsing.

2-Furoic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Danger	Causes severe	Do not breathe	
F20505			skin burns and	dust. IF ON	
			eye damage.	SKIN (or hair):	
				Take off	
				immediately all	
				contaminated	
				clothing. Rinse	
				skin with water.	
				Wear protective	
				gloves/	
				protective	
				clothing/ eye	
				protection/ face	
				protection. IF	
				INHALED:	
				Remove person	
				to fresh air and	
				keep	
				comfortable for	
				breathing.	
				Immediately call	
				a POISON	
				CENTER/ doctor.	
				IF IN EYES:	
				Rinse cautiously	
				with water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Wash	
				contaminated	
				clothing before	
				reuse.	

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2-Ethylbutyric	c acid				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Danger	Toxic in contact	Do not breathe	
109959			with skin.	mist or vapors.	
			Causes skin	IF ON SKIN:	
			irritation.	Wash with	
			Causes serious	plenty of	
			eye irritation.	water.Call a	
			May cause	POISON	
			damage to	CENTER/ doctor	
			organs (Blood,	if you feel	
			Liver, Kidney)	unwell. Wash	
			through	skin thoroughly	
			prolonged or	after handling.	
			repeated	IF IN EYES:	
			exposure if	Rinse cautiously	
			swallowed.	with water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Wear	
				protective	
				gloves/	
			$\Lambda$	protective clothing/ eye	
				protection/ face	
				protection, face	
				medical advice/	
				attention if you	
				feel unwell.	
				Tieel uliwell.	

2,4-Dihydroxy-butanoic acid							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
					Not a hazardous		
					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

2-Acetylpyrazine						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Aldrich -		Warning	Causes skin	Avoid breathing		
W312606		_	irritation.	dust. IF ON		
			Causes serious	SKIN: Wash		

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eye irritation.	with plenty of	
May cause	water. Wash	
respiratory	skin thoroughly	
irritation.	after handling.	
iiiicacioii.	IF IN EYES:	
	Rinse cautiously	
	with water for	
	several minutes.	
	Remove contact	
	lenses, if	
	present and	
	easy to do.	
	Continue	
	rinsing. Use	
	only outdoors or	
	in a well-	
	ventilated area.	
	Wear protective	
	gloves/ eye	
	protection/ face	
	protection.	

2-Amino-1-phenylethanol						
<b>2-Amino-1-</b> Product identifier	Pictogram	Signal Word Warning	Hazard Statements Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Precautionary Statements  Avoid breathing dust. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and	Supplemental information	
				easy to do. Continue		
				rinsing.		

1,5-Anhydro-	D-sorbitol				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - A7165					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.

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(s)-3-(allylsu	lphinyl)-l-ala	nine			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier	_	Word	Statements	Statements	information
Sigma-Aldrich		Warning	Causes skin	Avoid breathing	
- 72805			irritation.	dust. IF ON	
			Causes serious	SKIN: Wash	
			eye irritation.	with plenty of	
			May cause	water. Wash	
			respiratory	skin thoroughly	
			irritation.	after handling.	
				IF IN EYES:	
				Rinse cautiously	
				with water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Use	
				only outdoors or	
				in a well-	
				ventilated area.	
				Wear protective	
				gloves/ eye	
				protection/ face	
				protection.	

2-Keto-L-gluconate							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
					Not a hazardous		
					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

N-Suberoyl gl	N-Suberoyl glycine						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma-Aldrich - 52888					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.		

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Sinigrin					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

(S)-(-)-2-Me	r r	Cianal	Hazard	Drocoutionany	Cupplomontal
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Flammable	Keep away	Repeated
A83407			liquid and vapor.	from heat, hot	exposure may
			Harmful if	surfaces,	cause skin
			inhaled.	sparks, open	dryness or
			May cause	flames and	cracking.
			respiratory	other ignition	
			irritation.	sources. No	
				smoking. IF	
				INHALED:	
				Remove person	
				to fresh air and	
				keep	
				comfortable for	
				breathing. Call a	
				POISON	
				CENTER/ doctor	
				if you feel	
				unwell.	

2-Methyltetr	2-Methyltetrahydrofuran-3-one						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Aldrich -		Warning	Flammable	Keep away			
W337307			liquid and vapor.	from heat, hot			
			Harmful if	surfaces,			
			swallowed.	sparks, open			
				flames and			
				other ignition			
				sources. No			
				smoking. IF			
				SWALLOWED:			
				Call a POISON			
				CENTER/ doctor			
				if you feel			
				unwell. Keep			
				container tightly			
				closed.			
				Ground and			

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bond container
and receiving
equipment.
Use explosion-
proof electrical/
ventilating/
lighting/
equipment.
Use non-
sparking tools.

3-Hydroxyi	sobutyric acid				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

3-Furoic acid	d				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Causes skin	Wash skin	
163392			irritation.	thoroughly after	
			Causes serious	handling. IF ON	
			eye irritation.	SKIN: Wash	
				with plenty of	
				water. Wear	
			V	protective	
				gloves/ eye	
				protection/ face	
				protection. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. If skin	
				irritation occurs:	
				Get medical	
				advice/	
				attention. If	
				eye irritation	
				persists: Get	
				medical advice/	

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	_ LL L'	
	STEANTION	

2-Methyl-2-p	entenoic acid	d			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Danger	Causes severe	Do not breathe	
W319519			skin burns and	dust. IF ON	
			eye damage.	SKIN (or hair):	
				Take off	
				immediately all	
				contaminated	
				clothing. Rinse	
				skin with water.	
				Wear protective	
				gloves/	
				protective	
				clothing/ eye	
				protection/ face	
				protection. IF	
				INHALED:	
				Remove person	
				to fresh air and	
				keep	
				comfortable for	
				breathing.	
				Immediately call	
				a POISON	
				CENTER/ doctor.	
				IF IN EYES:	
				Rinse cautiously	
				with water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Wash	
				contaminated	
				clothing before	
				reuse.	<u> </u>

Methylmalonic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	Causes skin	Avoid breathing	
M2633			irritation.	dust/ fume/	
			Causes serious	gas/ mist/	
			eye irritation.	vapors/ spray.	
			May cause	IF IN EYES:	
			respiratory	Rinse cautiously	

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	irritation.	with water for	
		several minutes.	
		Remove contact	
		lenses, if	
		present and	
		easy to do.	
		Continue	
		rinsing.	

2-Picolinic aci	d				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
		Danger	Harmful if swallowed. Causes serious eye damage.	Wash skin thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Dispose of contents/ container to an approved waste disposal plant. 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. Wear eye protection/ face protection.	

Dihydrothymine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information

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	xybenzaldehy				1
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Causes skin	Avoid breathing	
419370			irritation.	dust. IF ON	
			Causes serious	SKIN: Wash	
			eye irritation.	with plenty of	
			May cause	water. Wash	
			respiratory	skin thoroughly	
			irritation.	after handling.	
				IF IN EYES:	
				Rinse cautiously	
				with water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Use	
				only outdoors or	
				in a well-	
				ventilated area.	
				Wear protective	
				gloves/ eye	
				protection/ face	
				protection.	

3,5-Dihydrox	3,5-Dihydroxybenzoic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Aldrich - D110000		Warning	Causes skin irritation. Causes serious eye irritation.	Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Wear protective gloves/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue	Information	
				gloves/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.		

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irritation occurs:
Get medical
advice/
attention. If
eye irritation
persists: Get
medical advice/
attention.

3-(3',4'-Dihy	3-(3',4'-Dihydroxyphenyl)lactic acid sodium salt				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Cerilliant -					Not a hazardous
PHY80042					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

3,4,5-Trimetho	3,4,5-Trimethoxy-trans-cinnamic acid				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	May cause an	Avoid breathing	
T4002			allergic skin	dust. IF ON	
			reaction.	SKIN: Wash	
			Causes serious	with plenty of	
			eye irritation.	water. 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.	
				Contaminated	
				work clothing	
				should not be	
				allowed out of	
				the workplace.	
				Wear protective	
				gloves/ eye	
				protection/ face	
				protection.	

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Acrylamide Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier	lictogram	Word	Statements	Statements	information
			Toxic if	Do not handle	IIIIOIIIIatioii
Sigma-Aldrich		Danger			
- 01699			swallowed.	until all safety	
			Harmful in	precautions	
			contact with skin	have been read	
			or if inhaled.	and understood.	
			Causes skin	IF SWALLOWED:	
			irritation.	Immediately call	
			May cause an	a POISON	
			allergic skin	CENTER/ doctor.	
			reaction.	Wear protective	
			Causes serious	gloves/	
			eye irritation.	protective	
			May cause	clothing/ eye	
			genetic defects.	protection/ face	
			May cause	protection. IF	
			cancer.	ON SKIN: Wash	
			Suspected of	with plenty of	
			damaging	water.Call a	
			fertility.	POISON	
			Causes damage	CENTER/ doctor	
			to organs	if you feel	
			(Peripheral	unwell. IF	
			nervous system)	INHALED:	
			through	Remove person	
			prolonged or	to fresh air and	
			repeated	keep	
			exposure if	comfortable for	
			swallowed.	breathing. Call a	
				POISON	
				CENTER/ doctor	
				if you feel	
				unwell. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing.	

DL-3-Aminoisobutyric acid					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Aldrich -					No hazard

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217794			signal word, no
			hazard
			statement(s), no
			precautionary
			statement(s)
			required.

3-Hydroxyv	3-Hydroxyvaleric acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
					Not a hazardous	
					substance or	
					mixture	
					according to	
					Regulation (EC)	
					No 1272/2008.	

3-Methylth	3-Methylthiopropionic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
					Not a hazardous	
					substance or	
					mixture	
					according to	
					Regulation (EC)	
					No 1272/2008.	

4-Hydroxy-3-	4-Hydroxy-3-methylbenzoic acid				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Aldrich - 659282		Danger	Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.	Avoid breathing dust. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Wear protective gloves/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact	

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	lenses, if
	present and
	easy to do.
	Continue
	rinsing.

Arecoline					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
		Danger	Causes skin	Obtain special	
			irritation.	instructions	
			Causes serious	before use. IF	
			eye irritation.	ON SKIN: Wash	
			May cause	with plenty of	
			genetic defects.	water. Do not	
			Suspected of	handle until all	
			causing cancer.	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. Wash	
			VIII	skin thoroughly	
				after handling.	
				IF exposed or	
				concerned: Get	
				medical advice/	
				attention.	

4,5-Dihydro	4,5-Dihydroorotic acid					
Product identifier	Pictogram	Signal Word Warning	Hazard Statements Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Precautionary Statements  Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. IF ON SKIN: Wash with plenty of water. Wash skin thoroughly after handling. IF IN	Supplemental information	
				EYES: Rinse		

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cautiously with
water for
several minutes.
Remove contact
lenses, if
present and
easy to do.
Continue
rinsing. Use
only outdoors or
in a well-
ventilated area.
Wear protective
gloves/ eye
protection/ face
protection.

3-Methylxanthine					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -					No hazard
M2509					pictogram, no
					signal word, no
					hazard
					statement(s), no
					precautionary
					statement(s)
					required.

2-Hydroxy-	5-methoxyber	zoic acid			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -					Not a hazardous
146188					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

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Arbutin					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
A4256					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008

Amygdalin					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	Harmful if	Wash skin	
A6005			swallowed.	thoroughly after	
				handling. IF	
				SWALLOWED:	
				Call a POISON	
				CENTER/ doctor	
				if you feel	
				unwell. Dispose	
				of contents/	
				container to an	
				approved waste	
				disposal plant.	
				Do not eat,	
				drink or smoke	
				when using this	
				product.	

Cyclohexanone					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma-Aldrich - 29135		Danger	Flammable liquid and vapor. Harmful if swallowed, in contact with skin or if inhaled. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Wear protective gloves/ protective clothing/ eye protection/ face	

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protection. IF
ON SKIN (or
hair): Take off
immediately all
contaminated
clothing. Rinse
skin with water.
IF INHALED:
Remove person
to fresh air and
keep
comfortable for
breathing. Call a
POISON
CENTER/ doctor
if you feel
unwell. IF IN
EYES: Rinse
cautiously with
water for
several minutes.
Remove contact
lenses, if
present and
easy to do.
Continue
rinsing.

2-Methyl-3-pe	2-Methyl-3-pentanone					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
Sigma-Aldrich - 04222		Danger	Highly flammable liquid and vapor.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion- proof electrical/ ventilating/ lighting/ equipment. Use non-		

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sparking tools.  Take action to
prevent static discharges.

β-Hydroxyiso	valeric acid				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Causes skin	Avoid breathing	
55453			irritation.	mist or vapors.	
			Causes serious	IF ON SKIN:	
			eye irritation.	Wash with	
			May cause	plenty of water.	
			respiratory	Wash skin	
			irritation.	thoroughly after	
				handling. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Use only outdoors or	
				in a well-	
				ventilated area.	
				Wear protective	
	7			gloves/ eye	
				protection/ face	
				protection.	

Cyclohexanecarboxylic acid Cyclohexanecarboxylic Acid					
Product identifier Aldrich - 101834	Pictogram	Signal Word Warning	Hazard Statements Harmful if swallowed. Causes serious eye irritation.	Precautionary Statements Wash skin thoroughly after handling. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Dispose of contents/ container to an	Supplemental information
				approved waste disposal plant. Wear eye protection/ face	

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protection. IF IN
EYES: Rinse
cautiously with
water for
several minutes.
Remove contact
lenses, if
present and
easy to do.
Continue
rinsing. If eye
irritation
persists: Get
medical advice/
attention.

Ethyl aceto	Ethyl acetoacetate						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Aldrich - 10912					No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required.		

Citramalic aci	id				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
		Warning	Causes serious eye irritation.	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. Wear eye protection/ face protection. If eye irritation persists: Get medical advice/ attention.	

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Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma-Aldrich - 83073		Warning	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing mist or vapors. IF ON SKIN: Wash with plenty of water. 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. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.	Information

Betonicine						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	

beta-Glycerophosphoric acid						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
					Not a hazardous	
					substance or	
					mixture	
					according to	
					Regulation (EC)	
					No 1272/2008.	

L-Canavanine					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	Harmful if	Avoid breathing	
C1625			swallowed, in	dust. IF	
			contact with skin	SWALLOWED:	

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or if inhaled.	Call a POISON	
	CENTER/ doctor	
	if you feel	
	unwell. Wash	
	skin thoroughly	
	after handling.	
	IF ON SKIN:	
	Wash with	
	plenty of	
	water.Call a	
	POISON	
	CENTER/ doctor	
	if you feel	
	unwell. Wear	
	protective	
	gloves/	
	protective	
	clothing. IF	
	INHALED:	
	Remove person	
	to fresh air and	
	keep	
	comfortable for	
	breathing. Call a	
	POISON	
	CENTER/ doctor	
	if you feel	
	unwell.	
	unwen.	

L-(+)-Ergothic	neine				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
E7521					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

2'-Deoxyinosine						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
Aldrich - 852279					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008	

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3-Hydroxyc	oumarin				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Harmful if	Wash skin	
642673			swallowed.	thoroughly after	
				handling. IF	
				SWALLOWED:	
				Call a POISON	
				CENTER/ doctor	
				if you feel	
				unwell. Dispose	
				of contents/	
				container to an	
				approved waste	
				disposal plant.	
				Do not eat,	
				drink or smoke	
				when using this	
				product.	

Hydroquinon					1
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Katayama -		Danger	Harmful if	Avoid release to	
13-1930			swallowed.	the	
			May cause an	environment. IF	
			allergic skin	SWALLOWED:	
			reaction.	Call a POISON	
			Causes serious	CENTER/ doctor	
			eye damage.	if you feel	
			Suspected of	unwell. Wear	
			causing genetic	protective	
			defects.	gloves/	
			Suspected of	protective	
			causing cancer.	clothing/ eye	
			Very toxic to aquatic life with	protection/ face protection. IF	
			long lasting	ON SKIN: Wash	
			effects.	with plenty of	
			enects.	water. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. IF	
				exposed or	

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	concerned: Get	
	medical advice/	
	attention.	

Ethyl pyruvat			<del>,</del>	<del>,</del>	_
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Identifie		Danger	Flammable liquid and vapor. Causes severe skin burns and eye damage.	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. Ground and bond container and receiving equipment. Wear protective gloves/ protective clothing/ eye protection/ face	Intornation

D-allo-Threonine						
ProductPictogramSignalHazardPrecautionarySupplementidentifierWordStatementsStatementsinformation						

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Isonicotinic a	Isonicotinic acid						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Katayama -		Warning	Causes serious	IF IN EYES:			
15-2160			eye irritation.	Rinse cautiously			
				with water for			
				several minutes.			
				Remove contact			
				lenses, if			
				present and			
				easy to do.			
				Continue			
				rinsing.			

Kojic acid					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - K3125					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2,5-Dihydro	xybenzoic aci	<u>d</u>			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Harmful if	Wash skin	
149357			swallowed.	thoroughly after	
				handling. IF	
			V I I I	SWALLOWED:	
				Call a POISON	
				CENTER/ doctor	
				if you feel	
				unwell. Dispose	
				of contents/	
				container to an	
				approved waste	
				disposal plant.	
				Do not eat,	
				drink or smoke	
				when using this	
				product.	

Galactonic acid						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information	
					Not a hazardous substance or mixture according to	

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Glucaric acid	i				
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

Regulation (EC) No 1272/2008.

L-a-Glycerophosphorylcholine						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Sigma -					No hazard	
G5291					pictogram, no	
					signal word, no	
					hazard	
					statement(s), no	
					precautionary	
					statement(s)	
					required.	

Geniposidic acid					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma - SMB00441		Warning	Harmful if swallowed.	IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.	

Flavin mononucleotide						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Aldrich -					Not a hazardous	
CDS020791					substance or	
					mixture	
					according to	
					Regulation (EC)	
					No 1272/2008.	

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Levulinic acid	1	1		1	1
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma-Aldrich - 61380		Danger	Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage.	Avoid breathing dust. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Wear protective gloves/ eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	

Nicotinamide	Nicotinamide (Niacinamide)						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Supelco -		Warning	Causes serious	Wash skin			
47865-U			eye irritation.	thoroughly after			
				handling. IF IN			
				EYES: Rinse			
				cautiously with			
				water for			
				several minutes.			
				Remove contact			
				lenses, if			
				present and			
				easy to do.			
				Continue			
				rinsing. Wear			
				eye protection/			
				face protection.			
				If eye irritation			
				persists: Get			
				medical advice/			

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	_	
	attention	
	attention.	

3-Hydroxy-2-	3-Hydroxy-2-methyl-4-pyrone						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Aldrich -		Warning	Harmful if	Wash skin			
H43407			swallowed.	thoroughly after			
				handling. IF			
				SWALLOWED:			
				Call a POISON			
				CENTER/ doctor			
				if you feel			
				unwell. Dispose			
				of contents/			
				container to an			
				approved waste			
				disposal plant.			
				Do not eat,			
				drink or smoke			
				when using this			
				product.			

S-Methyl-L-cysteine						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental	
identifier		Word	Statements	Statements	information	
Sigma-Aldrich					Not a hazardous	
- 66560					substance or	
					mixture	
					according to	
					Regulation (EC)	
					No 1272/2008.	

Methyl nicoti	Methyl nicotinate							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information			
Aldrich - M59203		Warning	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing dust. IF ON SKIN: Wash with plenty of water. 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				

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rinsing. Use
only outdoors or
in a well-
ventilated area.
Wear protective
gloves/ eye
protection/ face
protection.

2,5-Dimethyl-	2,5-Dimethyl-4-methoxy-3(2H)-furanone						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma-Aldrich		Warning	Harmful if	Wash skin			
- 55187			swallowed.	thoroughly after			
				handling. IF			
				SWALLOWED:			
				Call a POISON			
				CENTER/ doctor			
				if you feel			
				unwell. Dispose			
				of contents/			
				container to an			
				approved waste			
				disposal plant.			
				Do not eat,			
				drink or smoke			
				when using this			
				product.			

1,6-Anhydro-β	1,6-Anhydro-β-D-glucose						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Aldrich -					Not a hazardous		
316555					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008.		

N <sub>a</sub> -Acetyl-L-c	$N_a$ -Acetyl-L-ornithine						
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental		
identifier		Word	Statements	Statements	information		
Sigma -					Not a hazardous		
A3626					substance or		
					mixture		
					according to		
					Regulation (EC)		
					No 1272/2008		

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scyllo-Inositol					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -					Not a hazardous
I8132					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

Lenticin					
Product identifier	Pictogram	Signal Word	Hazard	Precautionary Statements	Supplemental information
identifier		word	Statements	Statements	
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

Maltotriose					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma-Aldrich					Not a hazardous
- 63430					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008

Malonyl-CoA					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

3-Methyl-2-butenoic acid							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma-Aldrich - 38880		Danger	Causes skin irritation. Causes serious eye damage. May cause respiratory irritation.	Avoid breathing dust. IF ON SKIN: Wash with plenty of water. Wash skin thoroughly after handling. IF IN EYES:			

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		Rinse cautiously	
		with water for	
		several minutes.	
		Remove contact	
		lenses, if	
		present and	
		easy to do.	
		Continue	
		rinsing. Use	
		only outdoors or	
		in a well-	
		ventilated area.	
		Wear protective	
		gloves/ eye	
		protection/ face	
		protection.	

2-Methylpher	ıol				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Supelco -		Danger	Toxic if	Do not breathe	
442361			swallowed or in	dust. IF ON	
			contact with	SKIN (or hair):	
			skin.	Take off	
			Causes severe	immediately all	
			skin burns and	contaminated	
			eye damage.	clothing. Rinse	
			Harmful to	skin with water.	
			aquatic life with	Avoid release to	
			long lasting	the	
			effects.	environment. IF	
				INHALED:	
				Remove person	
				to fresh air and	
				keep	
				comfortable for	
				breathing.	
				Immediately call	
				a POISON	
				CENTER/ doctor.	
				Wear protective	
				gloves/	
				protective	
				clothing/ eye	
				protection/ face	
				protection. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	

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	1				
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing.	
		<b> </b>		i illisiligi	
S-(2-Amino	ethyl)-L-cyste	ine			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier	1.000 9. 0	Word	Statements	Statements	information
identifici		Word	Statements	Statements	Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.
Γ=					
Tropic acid	Diate	C:	11	Dun coutt.	Cummlarass
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -					Not a hazardous
T89206					substance or
					mixture.
p-Hydroxym	andelic acid	_			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.
					100 1272/2000.
S-Carboxyme	thyl-L-cysteine				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
					Not a hazardous
					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.
					110 12/2/2000.
L-Iditol					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		11010	Statements	Statements	Not a hazardous
I6035					substance or
1 10022	1	1			
					mixtura
					mixture
					mixture according to Regulation (EC)

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		No 1272/2008

Seleno-L-meth	ionine				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Danger	Toxic if	Do not breathe	
S3132			swallowed or if	dust. IF	
			inhaled.	SWALLOWED:	
			May cause	Immediately call	
			damage to	a POISON	
			organs through	CENTER/ doctor.	
			prolonged or	Wash skin	
			repeated	thoroughly after	
			exposure.	handling. IF	
			Very toxic to	INHALED:	
			aquatic life with	Remove person	
			long lasting	to fresh air and	
			effects.	keep	
				comfortable for	
				breathing. Call a	
				POISON	
				CENTER/ doctor.	
				Avoid release to	
				the	
				environment.	
				Get medical	
				advice/	
				attention if you feel unwell.	
				reer unwen.	

Pilocarpine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
		Danger	Fatal if swallowed or if inhaled.	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. Do not eat, drink or smoke when	

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

Prephenate					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

5-Methylurio	5-Methyluridine							
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Aldrich -					No hazard			
535893					pictogram, no			
					signal word, no			
					hazard			
					statement(s), no			
					precautionary			
					statement(s)			
					required.			

D-(-)-Salicin					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma -		Warning	May cause an	Wear protective	
S0625			allergic skin	gloves. IF ON	
			reaction.	SKIN: Wash	
				with plenty of	
				water.	

o-Toluic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -					No hazard
S459585					pictogram, no
					signal word, no
					hazard
					statement(s), no
					precautionary
					statement(s)
					required.

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Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
dentifier	_	Word	Statements	Statements	information
identifier Cerilliant - PHY80166		Warning	Statements Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing dust. IF ON SKIN: Wash with plenty of water. 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. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye protection/ face protection.	information

1-Phenyl-1,2-propanedione							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma - P2259		Warning	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Avoid breathing mist or vapors. IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Wash skin thoroughly after handling. IF ON SKIN: Wash with plenty of water. Use only outdoors or in a well-ventilated area. IF IN EYES: Rinse cautiously with water for several minutes.			

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Remove contact
lenses, if
present and
easy to do.
Continue
rinsing.

(S)- $(-)$ -Citron		<u>,                                      </u>		<u> </u>	1
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Causes skin	Avoid breathing	
373753			irritation.	mist or vapors.	
			Causes serious	IF ON SKIN:	
			eye irritation.	Wash with	
			May cause	plenty of water.	
			respiratory	Wash skin	
			irritation.	thoroughly after	
				handling. IF IN	
				EYES: Rinse	
				cautiously with	
				water for	
				several minutes.	
				Remove contact	
				lenses, if	
				present and	
				easy to do.	
				Continue	
				rinsing. Use	
				only outdoors or	
				in a well-	
				ventilated area.	
				Wear protective	
				gloves/ eye	
				protection/ face	
				protection.	I

Vanillic acid					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -					Not a hazardous
W398802					substance or
					mixture
					according to
					Regulation (EC)
					No 1272/2008.

L-Theanine					
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information
Sigma -		Warning	May cause an allergic skin	Avoid breathing dust. IF ON	

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SMB00395	reaction.	SKIN: Wash	
		with plenty of	
		water.	
		Contaminated	
		work clothing	
		should not be	
		allowed out of	
		the workplace.	
		If skin irritation	
		or rash occurs:	
		Get medical	
		advice/	
		attention.	
		Wear protective	
		gloves. Take off	
		contaminated	
		clothing and	
		wash it before	
		reuse.	

(-)-Cotinin	е				
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Aldrich -		Warning	Harmful if	Avoid breathing	
284718			swallowed.	dust. IF IN	
			Causes skin	EYES: Rinse	
			irritation.	cautiously with	
			Causes serious	water for	
			eye irritation.	several minutes.	
			May cause	Remove contact	
			respiratory	lenses, if	
			irritation.	present and	
				easy to do.	
				Continue	
				rinsing.	

1-Methyluric	1-Methyluric acid						
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma-Aldrich - 67076					No hazard pictogram, no signal word, no hazard statement(s), no precautionary		
					statement(s) required.		

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Adenosine pr	osphosulfate	е			
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
identifier		Word Warning	Statements Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.	Statements  Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. IF ON SKIN: Wash with plenty of water. 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. Use only outdoors or in a well-ventilated area. Wear protective gloves/ eye	information

Genistin							
Product identifier	Pictogram	Signal Word	Hazard Statements	Precautionary Statements	Supplemental information		
Sigma - G0897					Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.		

Orientin					
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental
identifier		Word	Statements	Statements	information
Sigma-Aldrich					Not a hazardous
- 03810585					substance or
					mixture.

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Myricitrin								
Product	Pictogram	Signal	Hazard	Precautionary	Supplemental			
identifier		Word	Statements	Statements	information			
Sigma-Aldrich					Not a hazardous			
- 02180585					substance or			
					mixture			
					according to			
İ					Regulation (EC)			
					No 1272/2008.			

## CHEMIKART

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