

Printing date 06/28/2022 Reviewed on 06/28/2022

1 Identification

· Product identifier

· Trade name: Ecolite(+)

· Article number: 882475

· Application of the substance / the mixture For Research or Further Manufacturing Use.

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: MP Biomedicals, LLC 29525 Fountain Parkway Solon, OH 44139 United States www.mpbio.com

· Information department: Quality Control Department

• Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Phenylxylylethane-PXE alkyl ethoxylate phosphate ester Ethoxylated Nonylphenol alkyl phenol ethoxyate

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

(Contd. on page 2)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

(Contd. of page 1)

Causes serious eye irritation.

May be fatal if swallowed and enters airways.

· Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves / eye protection / face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

Do NOT induce vomiting.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = *2Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

Mixture of substances listed below with nonhazardous additions.

Mixture: consisting of the following components.

· Dangerous components:		
CAS: 6196-95-8	Phenylxylylethane-PXE	10-50%
CAS: 9016-45-9 NLP: 500-024-6	Ethoxylated Nonylphenol	10-50%
CAS: 68412-53-3 EC number: 614-460-0	alkyl ethoxylate phosphate ester	1-2.5%
CAS: 68412-54-4 NLP: 500-209-1	alkyl phenol ethoxyate	1-2.5%

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

(Contd. of page 2)

4 First-aid measures

- · Description of first aid measures
- · General information:

Consult your Doctor. Show the safety data sheet to the Doctor. Away from the dangerous area.

- · After inhalation: If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- · After skin contact: Wash off with soap and plenty of water. Consult a Doctor.
- · After eve contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. If symptoms persist consult a Doctor.

- · Information for doctor
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- $\cdot \textit{Methods and material for containment and cleaning up:}$

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Pick up mechanically, dispose contaminated material as waste according to Section 13.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals

30 mg/m^3
2.3 mg/m³
43 mg/m³
30 mg/m^3
2.5 mg/m ³
30 ppm
5 ppm
17 ppm

(Contd. on page 4)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

7664-38-2	phosphoric acid	(Contd. of page 3 mg/m³
	1,4-bis(4-methyl-alpha-styryl)benzene	12 mg/m ²
PAC-2:	-s, con ment, april os, systeme	12 118/111
	Phenylxylylethane-PXE	330 mg/m
	Linear Alkylbenzene	26 mg/m ³
	Ethoxylated Nonylphenol	470 mg/m
	alkyl phenol ethoxyate	330 mg/m
	2,5-diphenyloxazole	27 mg/m ³
	2,3-aipnenyioxazote 2-(2-butoxyethoxy)ethanol	33 ppm
		* *
	ethylene oxide 1,4-dioxane	45 ppm
		320 ppm
	phosphoric acid	30 mg/m^3
	1,4-bis(4-methyl-alpha-styryl)benzene	130 mg/m
<i>PAC-3:</i>		
6196-95-8	Phenylxylylethane-PXE	2,000 mg/m
68648-87-3	Linear Alkylbenzene	150 mg/m^3
9016-45-9	Ethoxylated Nonylphenol	5,400 mg/m
68412-54-4	alkyl phenol ethoxyate	2,000 mg/m
92-71-7	2,5-diphenyloxazole	160 mg/m³
112-34-5	2-(2-butoxyethoxy)ethanol	200 ppm
75-21-8	ethylene oxide	200 ppm
123-91-1	1,4-dioxane	760 ppm
7664-38-2	phosphoric acid	150 mg/m^3
13280-61-0	1,4-bis(4-methyl-alpha-styryl)benzene	790 mg/m³

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Avoid direct contect with skin. Use protective clothing including gloves, lab coat, face/eye protection.

- · Information about protection against explosions and fires: No special requirements.
- · Conditions for safe storage, including any incompatibilities
- · Storage: 15-30°C
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Further information about storage conditions:
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see Section 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 5)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

(Contd. of page 4)

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Solution
Color: Colorless

Odor: Indeterminate
Odor threshold: Not determined.

pH-value: Not determined.

· Change in condition

Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

• Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

(Contd. on page 6)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

		(Contd. of page
· Danger of explosion:	See section 10	
· Explosion limits:		
Lower:	Not Applicable	
Upper:	Not Applicable	
· Vapor pressure:	Not Applicable	
· Density:	Not Applicable	
· Relative density	Not determined.	
· Vapor density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with	Not Determined	
· Water:	Not determined.	
	Insoluble.	
· Partition coefficient (n-octanol/wat	ter): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.2 %	
Water:	0.0 %	
VOC content:	0.20 %	
	2.0 g/l / 0.02 lb/gal	
· Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid

No further relevant information available.

Avoid contact with acids. Contact liberates a toxic gas.

- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:			
ATE (Acut	ATE (Acute Toxicity Estimate)		
Oral	LD50	786 mg/kg	
Inhalative	LC50/4 h	32.1 mg/L	

(Contd. on page 7)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

		(Contd. of page 6)	
6196-95-8	Phenylxyl	ylethane-PXE	
Oral	LD50	500 mg/kg (ATE)	
Inhalative	LC50/4 h	11 mg/L (ATE)	
68648-87- 3	3 Linear A	lkylbenzene	
Oral	LD50	>5,000 mg/kg (rat)	
Dermal	LD50	>2,000 mg/kg (rat)	
		>10,200 mg/kg (rabbit)	
9016-45-9	Ethoxylate	ed Nonylphenol	
Oral	LD50	500 mg/kg (ATE)	
68412-54-4	68412-54-4 alkyl phenol ethoxyate		
Oral	LD50	500 mg/kg (ATE)	

- · Primary irritant effect:
- · on the skin: Irritant to skin and mucous membranes.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

· Carcinogenic categories

· IARC (In	ternational Agency for Research on Cancer)	
75-21-8	ethylene oxide	1
123-91-1	1,4-dioxane	2B
· NTP (Nat	tional Toxicology Program)	
75-21-8	ethylene oxide	K
123-91-1	1,4-dioxane	R
· OSHA-Ca	a (Occupational Safety & Health Administration)	
75-21-8 e	ethylene oxide	

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

(Contd. on page 8)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

 $\cdot \textit{Other adverse effects} \ \textit{No further relevant information available}.$

(Contd. of page 7)

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Can not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Discard must be made according to official regulations.

TINI NII	
· UN-Number · DOT, ADR, IMDG, IATA	UN3082
· UN proper shipping name	
$\cdot DOT$	Environmentally hazardous substance, liquid, n.o.
	(Phenylxylylethane-PXE, Ethoxylated Nonylphenol)
· ADR	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE
	LIQUID, N.O.S. (Phenylxylylethane-PXE, Ethoxylate
· IMDG	Nonylphenol) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIA
· IWDG	N.O.S. (Phenylxylylethane-PXE, Ethoxylated Nonylphenol
	MARINE POLLUTANT
· IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUIA
	N.O.S. (Phenylxylylethane-PXE, Ethoxylated Nonylphenol)
DOT, ADR, IMDG, IATA	
· Class · Label	9 Miscellaneous dangerous substances and articles 9
Class Label Packing group	9
· Class · Label	
Class Label Packing group	9 III Product contains environmentally hazardous substance
Class Label Packing group DOT, ADR, IMDG, IATA	9 III
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant:	9 III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree)
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR):	9 III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree) Symbol (fish and tree)
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant:	9 III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree)
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA): Special precautions for user	III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree) Warning: Miscellaneous dangerous substances and articles
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA): Special precautions for user Hazard identification number (Kemler code):	III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree) Warning: Miscellaneous dangerous substances and articles
Class Label Packing group DOT, ADR, IMDG, IATA Environmental hazards: Marine pollutant: Special marking (ADR): Special marking (IATA): Special precautions for user	III Product contains environmentally hazardous substance Phenylxylylethane-PXE Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree) Warning: Miscellaneous dangerous substances and articles

(Contd. on page 9)

Reviewed on 06/28/2022 Printing date 06/28/2022

Trade name: Ecolite(+)

	(Contd. of page
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
DOT	
Quantity limitations	On passenger aircraft/rail: 450 L
~ .	On cargo aircraft only: 450 L
· Remarks:	Special marking with the symbol (fish and tree).
· <i>ADR</i>	
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· IMDG	
· Limited quantities (LQ)	5L
Excepted quantities (EQ)	Code: E1
	Maximum net quantity per inner packaging: 30 ml
	Maximum net quantity per outer packaging: 1000 ml
· UN ''Model Regulation'':	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANC
Ŭ	LIQUID, N.O.S. (PHENYLXYLYLETHANE-PX
	ETHOXYLATED NONYLPHENOL), 9, III

15 Regulatory information

75-21-8 ethylene oxide 123-91-1 1,4-dioxane

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.

· Sara				
· Section 355	· Section 355 (extremely hazardous substances):			
75-21-8 eth	ylene oxide			
· Section 313	(Specific toxic chemical listings):			
9016-45-9	Ethoxylated Nonylphenol			
68412-54-4	alkyl phenol ethoxyate			
112-34-5	2-(2-butoxyethoxy)ethanol			
75-21-8	ethylene oxide			
123-91-1	1,4-dioxane			
7664-38-2	phosphoric acid			
· TSCA (Toxi	c Substances Control Act):			
All compone	ents have the value ACTIVE.			
· Hazardous A	· Hazardous Air Pollutants			
75-21-8 et	hylene oxide			
123-91-1 1,	4-dioxane			
Proposition 65				
· Chemicals known to cause cancer:				

(Contd. on page 10)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

	(Contd. of page 9)
· Chemicals known to cause reproductive toxicity for females:	
75-21-8 ethylene oxide	
· Chemicals known to cause reproductive toxicity for males:	
75-21-8 ethylene oxide	
· Chemicals known to cause developmental toxicity:	
75-21-8 ethylene oxide	
Canaina a antagania	

· Carcinogenic categories

cur emogenic eurogenics				
· EPA (Env	ironmental Protection Agency)			
75-21-8	ethylene oxide	СаН		
123-91-1	1,4-dioxane	L		
,	· TLV (Threshold Limit Value)			
75-21-8	ethylene oxide	A2		
123-91-1	1,4-dioxane	A3		
	a (National Institute for Occupational Safety and Health)			
75-21-8	ethylene oxide			
123-91-1	1,4-dioxane			

- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS07

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Phenylxylylethane-PXE

alkyl ethoxylate phosphate ester

Ethoxylated Nonylphenol

alkyl phenol ethoxyate

· Hazard statements

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May be fatal if swallowed and enters airways.

· Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Wear protective gloves / eye protection / face protection.

If swallowed: Immediately call a poison center/doctor.

Specific treatment (see on this label).

Rinse mouth.

Do NOT induce vomiting.

If on skin: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

(Contd. on page 11)

Printing date 06/28/2022 Reviewed on 06/28/2022

Trade name: Ecolite(+)

(Contd. of page 10)

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- · Department issuing SDS: Quality Control Dept.
- · Contact:
- · Date of preparation / last revision 06/28/2022 / -
- · Abbreviations and acronyms:

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Asp. Tox. 1: Aspiration hazard – Category 1

US