

Vitamin A Liposomes (retinol)


Safety Data Sheet according to Federal Register / Vol. 77, No. 58 /
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1 PRODUCT & COMPANY IDENTIFICATION

Product Name:	Vitamin A Liposomes (retinol)	Distributor:	MakingCosmetics Inc.
Synonyms:	No data available	Address:	10800 231 st Way NE Redmond, WA 98053 (USA)
INCI Name:	Water, Pentylene Glycol, Lecithin, Retinol, Polysorbate 20, Alcohol, Potassium Phosphate		
CAS Number:	7732-18-5, 5343-92-0, 8002-43-5, 68- 26-8, 9005-64-5, 64-17-5, 7778-77-0	Phone / Fax:	425-292-9502 / 425-292-9601
Formula:	No data available	Web:	www.makingcosmetics.com
Product Form:	Liquid		
Product Use:	Cosmetic use	Emergency Telephone Number:	1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

Hazard Classification:	Serious Eye Damage/Eye Irritation - Category 1 Skin sensitizer - Category 1 Reproductive toxicity - Category 1B		
Signal Word:	DANGER		
Hazard Pictograms:			
Hazard Statements:	Causes serious eye damage. May cause an allergic skin reaction. May damage fertility or the unborn child.		
Precautionary Statements:	(Prevention) P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection (Response) P302: IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. P321: Specific treatment (see supplemental first aid instructions on this label). Take off contaminated clothing and wash it before reuse. P305: IF IN EYES: Rinse cautiously with water for several minutes. P338: Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. P308+311: IF exposed or concerned: Get medical advice/attention (Storage) P405: Store locked up. (Disposal) P501: Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.		
Potential Health Hazards:	Eyes: May cause eye irritation. Inhalation: May cause irritation. Skin: May be skin irritant. Ingestion: Harmful if swallowed.		
NFPA Ratings (704):	Health	2	Moderate
	Flammability	1	Slight
	Reactivity	0	Minimal
	Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>CAS No.</u>	<u>Weight %</u>	<u>Molecular Weight</u>
Water	7732-18-5	> 50%	Not Available
Pentylene glycol	5343-92-0	10% - 25%	Not Available
Lecithin	8002-43-5	10% - 25%	Not Available
Retinol	68-26-8	1% - 5%	Not Available
Polysorbate 20	9005-64-5	1% - 5%	Not Available
Alcohol	64-17-5	1% - 5%	Not Available
Potassium phosphate	7778-77-0	0.1% - 1%	Not Available
Tocopherol	10191-41-0	Not Available	Not Available
Ascorbyl Palmitate	137-66-6	Not Available	Not Available
BHT	128-37-0	Not Available	Not Available
BHA	25013-16-5	Not Available	Not Available

The exact concentration has been withheld as a trade secret.

4 FIRST AID MEASURES

Eyes:	With eye held open, thoroughly rinse immediately with plenty of water for at least 10 minutes. Notify emergency physician immediately (key words: burns in eye).
Inhalation:	Potential for exposure by inhalation if aerosols or mists are generated. After inhalation move subject to fresh air. With labored breathing: Provide with oxygen. Consult a doctor immediately. If the casualty is not breathing: Perform mouth to-mouth resuscitation, notify emergency physician immediately.
Skin:	Wash off affected area immediately with plenty of water for at least 15 minutes. Get medical attention if any discomfort continues.
Ingestion:	Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Rinse mouth. Immediately give large quantities of water to drink. Notify an emergency physician immediately.
General Information:	Pay attention to self-protection. Remove victims from hazardous area. Immediately remove soiled or soaked clothing and remove it to a safe distance. Keep victim warm, in a stabilized position and covered. Do not leave the victim unattended. Place patients who are unconscious but breathing in the stabilized lateral position.
Acute/Delayed Symptoms:	Strongly irritating to corrosive. The initial focus is only on the local action, characterized by quickly progressing deep tissue damage. Coughing is a symptom of a respiratory tract irritation after inhalation of aerosols or mists from caustic liquids. In the eye, caustic liquids cause, depending on the intensity of exposure, severe irritation, destruction, and ablation of the epithelium of the conjunctiva and cornea, corneal clouding, edema and ulcerations. Danger! Possible loss of eyesight! Superficial irritations and damage up to ulcerations and scarring develop on the skin.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	May be combustible at high temperature. Use appropriate media (Water spray, fog, CO ₂ , dry chemical, or alcohol resistant foam) for adjacent fire. Do not use a solid water stream as it may scatter and spread fire.
Special protective equipment & precautions for firefighters:	Use self-contained breathing apparatus and wear protective suit, including eye protection and boots. Contaminated extinguishing water must be treated at a suitable disposal plant in accordance with waste management laws. In case of fire, remove the endangered containers and bring to a safe place, if this can be done safely. Keep unauthorized personnel away.
Flash Points:	139.1°F (59.5°C) [DIN 51755] This material will flash but does not sustain combustion.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed such as carbon monoxide, and carbon dioxide. Under certain conditions of combustion traces of other toxic substances cannot be excluded

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Use personal protective equipment. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Do not allow to enter drains or waterways. Do not discharge into the subsoil/soil. Notify environmental authorities in case of leak.
Methods and material for	Take up with absorbent material (ex: sand, kieselguhr, universal binder). Dispose of

containment and cleaning up: absorbed material in accordance with the regulations.

7 HANDLING & STORAGE

Precautions for safe handling: Take precautionary measures against static discharges. Avoid residues of the product on the containers. Do not breathe in vapors, aerosols, sprays. Avoid contact with eyes, skin, and clothing. Wash hands before breaks and at the end of workday. Ensure suitable suction/aeration at the work place and with operational machinery. Handle in accordance with good industrial hygiene and safety practice. See section 8 for recommendations on the use of personal protective equipment.

Conditions for safe storage, incl. any incompatibilities: Recommended storage temperature: 39-42°F (4-6°C). Keep container tightly closed and dry. Protect from heat and exposure to direct sunlight. Please mix or shake before use. For further information, refer to the PDR (Product Data Record).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Vitamin A Liposomes (retinol)	None		

TWA: Time Weighted Average over 8 hours of work.
 TLV: Threshold Limit Value over 8 hours of work.
 REL: Recommended Exposure Limit
 PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
 IDLH: Immediately Dangerous to Life or Health
 WEEL: Workplace Environmental Exposure Levels
 CEIL: Ceiling

Personal Protection:

Eyes: Safety glasses with side-shields conforming to EN166 or when handling larger quantities: basket-shaped glasses.

Inhalation: In case of formation of vapors/aerosols: Short term: filter apparatus, combination filter A-P2.

Body: Select materials and equipment for physical protection depending on the concentration and volume of hazardous substances and the workplace involved. In order to determine further specifications applicable to the personal protection equipment, a hazard assessment according to the OSHA standards (29 CFR 1910.132) for personal protection equipment (PPE) is recommended before the product is used. Wash contact areas after handling. Take off clothing and shoes contaminated with product. Clean before reuse.

Other: Do not eat, drink, or smoke when working. Safety showers and eye showers should be easily accessible. Wash hands before breaks and immediately after handling the product. Do not wear contaminated clothing.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid	Oxidizing Properties:	No data available
Odor:	Aromatic	Vapor Pressure:	No data available
Odor Threshold:	No data available	Vapor Density:	No data available
Color:	Clear, yellowish	Metal Corrosion:	No data available
pH at 73 °F (23 °C):	6.5 - 7.5 (100% concentration)	Flammable Gases:	Upon contact with water, does not emit flammable gas
Boiling Point/Range:	>212 °F / >100 °C	Flash Point:	139.1 °F (59.5 °C) [DIN 51755] This material will flash but does not sustain combustion.
Self-Ignition Temperature:	Not classified as pyrophoric	Specific Gravity:	No data available
Self-Heating:	Not classified as self-heating	Solubility:	Miscible
Density:	No data available	Decomposition Temperature:	Not classified as self-reactive
Partition Coefficient: n-octanol/water:	No data available	Explosive Properties:	Not expected during handling
Viscosity:	No data available	Peroxides:	Not classified as organic peroxide
Oxidizing Properties:	Not classified as oxidizing	Metal Corrosion:	Not corrosive to metals

10 STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: The product is stable under normal conditions.

Hazardous Polymerization: No data available.

Conditions to Avoid:	No data available.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	None with proper storage and handling.
Possible Hazardous Reactions:	No hazardous reactions with proper storage and handling.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity:	No data available.
Skin:	Relevant route of exposure. (Rat) LD50; Component: Pentane-1,2-diol: > 2,000 mg/kg, OECD 402. Component: Retinol: Not toxic after single exposure.
Eyes:	Relevant route of exposure. Components: Pentane-1,2-diol; Risk of serious damage to eyes; OECD 405; Rabbit. Component: Retinol; Risk of serious damage to eyes, OECD 405, Rabbit.
Respiratory:	Relevant route of exposure. Not toxic after single exposure. (Rat) LC50; Component: Pentane-1,2-diol: 4 hours, > 7.015 mg/l, Dust and mist, OECD 403. Component: Retinol: Not toxic after single exposure.
Ingestion:	If handled correctly, not a relevant route of exposure. Not classified for acute toxicity based on available data. (Rat) LD50; Component: Pentane-1,2-diol: > 5,000 mg/kg, OECD 401, No deaths observed. (Rat) LD50; Component: Retinol: > 2,000 mg/kg, OECD 401. Not toxic after single exposure, No classification.
Carcinogenicity:	No carcinogens present or none present in regulated quantities under the IARC, ACGIH, NTP, or OSHA.
Germ Cell Mutagenicity:	No data available.
Embryotoxicity:	Not classified based on available data.
Reproductive Toxicity:	Not classified based on available data. Retinol is presumed as a human reproductive toxicant. May damage a fetus.
Skin Corrosion/Irritation:	Component: Pentane-1,2-diol; Not irritating; OECD 404; Rabbit. Component: Retinol; Slightly irritating; OECD 404; Rabbit.
Serious Eye Damage/Irritation:	Component: Pentane-1,2-diol; Risk of serious damage to eyes; OECD 405; Rabbit. Component: Retinol; Moderately irritating; OECD 405, Rabbit.
Skin Sensitization:	Component: Pentane-1,2-diol; Maximization Test; OECD 406; Guinea Pig; Not a skin sensitizer. Component: Retinol; Sensitization test; OECD 406; Guinea Pig; May cause sensitization by skin contact.
Aspiration Hazard:	Not classified.
Repeated Dose Toxicity:	(Rat) Component: Pentane-1,2-diol; NOAEL Oral, 90 days, daily, 1,000 mg/kg.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	No data available.
Aquatic Vertebrate:	(Danio rerio) Component: Pentane-1,2-diol; LC50; 96 hours; > 1,096 mg/l; OECD 203 (Leuciscus idus) Retinol LC50; 96 hours; > 10,000 mg/l (DIN 38412, part 15).
Aquatic Invertebrate:	(Daphnia magna) Component: Pentane-1,2-diol; EC50; 48 hours; > 500 mg/l; Directive 79/831 EEC. Component: Retinol; EC50; 48 hours; > 100 mg/l; OECD 202.
Algae:	(Desmodesmus subspicatus) Component: Pentane-1,2-diol; EC50, 72 hours, 9,334.69 mg/l, DIN 38412, T.9, growth rate. (Desmodesmus subspicatus) EC10, 72 hours, 5,477.33 mg/l, DIN 38412, T.9, growth rate.
Persistence and Degradability:	The product is easily biodegradable.
Bioaccumulative Potential:	Bioaccumulation is unlikely. No bioaccumulation is to be expected (log Pow <= 4).
Mobility in Soil:	This substance does not evaporate into the atmosphere from the surface of the water.
PBT and vPvB Assessment:	No data available.
Other Adverse Effects:	No data available.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.
Product Containers:	Do not reuse empty containers and dispose of in accordance with the regulations issued by the appropriate local authorities. Packaging material should be recycled or disposed of

in accordance with federal, state and local regulations. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated as dangerous goods.
UNRTDG (United Nations Recommendations on Transport):	Not regulated as dangerous goods.
IMDG (International Maritime Dangerous Goods):	Not regulated as dangerous goods of Class 3 IMDG-Code 2.3.1.3: Substance do not sustain combustion!
IATA/DGR (International Air Transport Association):	Not regulated as dangerous goods.
ICAO (International Civil Aviation Organization):	No data available.
Transport in bulk (Annex II of MARPOL 73/78 & IBC Code):	Not applicable for product as supplied.

15 REGULATORY INFORMATION

TSCA Inventory:	Included on Inventory.
TSCA Section 12(b) (40 CFR 707, Subpt. D):	None present or none present in regulated quantities (on the basis of current knowledge of the product composition).
(TSCA) Section 5(a) SNURS: (SNURs):	None present or none present in regulated quantities under 40 CFR 721, Subpt E (on the basis of current knowledge of the product composition).
US. OSHA Specifically Regulated Substances:	None present or none present in regulated quantities under (29 CFR 1910.1001-1053), as amended.
CERCLA:	None present or none present in regulated quantities under Hazardous Substance List (40 CFR 302.4).
SARA:	Hazard categories: Serious eye damage or eye irritation, Respiratory or Skin Sensitization, Reproductive toxicity.
SARA Title III Section 304:	None present or none present in regulated quantities (on the basis of current knowledge of the product composition).
SARA 313 (TRI Reporting):	None present or none present in regulated quantities.
Clean Air Act (CAA):	None present or none present in regulated quantities under Section 112(r) Accidental Release Prevention (40 CFR 68.130), or Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Clean Water Act Section 311:	None present or none present in regulated quantities (on the basis of current knowledge of the product composition).
Canada DSL Inventory List:	Not in compliance with the inventory.
US. California Prop 65:	WARNING: This product can expose you to chemicals including, Phenol, (1,1-dimethylethyl)-4-methoxy-, which is known to the State of California to cause cancer. This product can expose you to chemicals including, Retinol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

16 OTHER INFORMATION

Revision Date:	19-Nov-2025
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.