

SAFETY DATA SHEET



MANUFACTUROR: L&C ENTERPRISES
 2357 HWY. 53
 POPLARVILLE, MS 39470
 PHONE NO. 601-795-4147

FOR EMERGENCIES CALL INFOTRAC 800-535-5053

IDENTIFICATION

PRODUCT: SILICONE FREE DRESSING CAC119
CAS # 56-81-5
Material NON SILICONE AUTOMOBILE DRESSING (BODY SHOP SAFE)

HAZARD IDENTIFICATION

GHS Class (Category) NOT HAZARDOUS
Signal Words no Signal Words
Hazard Statements No hazard statements

GHS Symbols: No Symbols

COMPOSITION	CAS NUMBER		TLV ppm / mg/m ³	LD ₅₀ (mg/kg) ORAL	LD ₀ (mg/kg) SKIN	LC ₅ , ppm INHALATION
1,2,3-hydroxypropanoic	56-81-5	>99%	2.7 / 10	4090	>10,000	150

FIRST AID

SKIN: Wash with water. Remove contaminated clothing and do not reuse until laundered.
EYES: Wash eyes with plenty of water, holding eyelids open. Seek medical assistance if there is persistent irritation.
INHALATION: Remove from contaminated area promptly. **CAUTION: Rescuer must not endanger himself! If Victim's** breathing stops, administer artificial respiration and seek medical aid promptly.
INGESTION: Give plenty of water to dilute product. Do not induce vomiting (NOTE below). Keep victim quiet. If vomiting occurs, lower victim's head below hips to prevent inhalation of vomited material. Seek medical help promptly.

NOTE: Inadvertent inhalation of vomited material may seriously damage the lungs. The danger of this is greater than the risk of poisoning through absorption of this relatively low-toxicity product. The stomach should only be emptied under medical supervision, after the installation of an airway to protect the lungs.

FLAMMABILITY & FIRE-FIGHTING

Flash Point	199°C / 390°F (closed cup)
Auto ignition	370°C / 698°F — <i>this represents the auto ignition of decomposition products</i>
Temperature Flammable	Not known
Limits Combustion	Carbon monoxide, nitrogen oxides, smoke, acrolein, part oxidized hydrocarbon fragments
Products Firefighting	Alcohol foam is best, dry chemical, water fog — water jet spreads flames & causes frothing
Precautions	Firefighters must wear SCBA Cannot accumulate a static charge
Static Discharge	

ACCIDENTAL RELEASE MEASURES

Leak Precaution	dyke to control spillage and prevent environmental contamination
Handling Spill	ventilate contaminated area; recover free liquid with suitable pumps; absorb residue on an inert sorbent; sweep, shovel & store in closed containers for disposal

HANDLING & STORAGE

Glycerol absorbs moisture from air. Store and use in a dry environment, away from oxidizing agents. Never cut, drill, weld or grind on this container, whether empty or full. Always replace drum, pail or IBC cap prior to moving the container!

Avoid generating or breathing product mist. Use with adequate ventilation to maintain airborne concentration of the product below the TLV (see IV, IX above). Avoid prolonged contact with skin and wash work clothes frequently. An eye bath should be available near the workplace.

NOTE: Glycerol is very sweet. Keep away from children and animals!

EXPOSURE CONTROL & PERSONAL PROTECTION

ACGIH TLV	
OSHA PEL	2.7ppm / 10mg/m³
STEL	2.7ppm / 10mg/m³
Ventilation	4ppm / 15mg/m³
Hands	Mechanical ventilation may be required to control airborne concentration if a mist is generated
Eyes	No special protective glove required
Clothing	Safety glasses with side shields or chemical goggles — always protect eyes! No special protective clothing required

PHYSICAL AND CHEMICAL PROPERTIES

Odor & Appearance	clear, colorless, odorless, viscous, hygroscopic liquid with a sweet taste
Odor Threshold	not known — odorless
Vapor Pressure	0.0023mmHg / 0.00031kPa (20°C / 68°F)
Evaporation Rate (<i>Butyl Acetate</i> = 1)	not considered volatile
Vapor Density (air = 1)	3.2
Boiling Point	decomposes at 290°C / 554°F without boiling
Melting Point	18°C / 64°F — <i>NOTE: glycerol supercools readily; may not freeze until below 0°C / 32°F</i>
Specific Gravity	1.264 (20/20°C)
Water Solubility	complete
- In other solvents	alcohols, glycols; insoluble in hydrocarbons, chlorinated hydrocarbons and ethers
Log K _{oh} , (<i>Octanol/H₂O Partition Coefficient</i>)	-2.6
Viscosity	1490centipoise (20°C/68°C)
pH	none — <i>does not yield hydrogen ions in solution</i>
Conversion Factor	1ppm = 3.76mg/m ³
Molecular Weight	92grams per mole

PLEASE ENSURE THAT THIS MSDS IS GIVEN TO, AND EXPLAINED TO PEOPLE USING THIS PRODUCT.

Dangerously Reactive With	Strong oxidizing agents (chromium trioxide, potassium chlorate, or potassium permanganate) May cause an explosion
Also Reactive With	Acetic anhydride
Chemical Stability	Stable, but may polymerase above 150°C/300°F
Decomposes in Presence of	Heat above 290°C / 554°F
Decomposition Products	Toxic acrolein fumes may form on thermal decomposition
Mechanical Impact	Not sensitive

ACUTE-EXPOSURE

Skin Contact	No effect apart from softening skin
Skin Absorption	Slight, no toxic effects likely by this route
Eye Contact	May be mildly irritating
Inhalation	Mist may be slightly irritating
Ingestion	Little to no effect; <i>very large doses</i> — 1/2 liter — <i>may damage red cells and cause bloody urine; this Effect is brief as glycerol is eliminated from the body within 2-3 hours</i>
General	Little •to no effect
Sensitizing	Not a sensitizer
Carcinogen/Tumorigenic	Not known to be a tumorigenic or a carcinogen in humans or animals
Reproductive Effect	No known effect on humans or animals
Mutagen	Not known to be a mutagen or teratogen in humans or animals
Synergistic With	Not known
LD ₅₀ (oral)	12,600 & 27,200mg/kg (rat), 4090, 23,000 & 38,000mg/kg (mouse), 27,000mg/kg (rabbit), 7750 & 10,000-11,500mg/kg (guinea pig)
LD ₅₀ (skin)	>10,000, 21,900 & 23,000mg/kg (rabbit)
LC ₅₀ (inhalation)	38ppm/143mg/m ³ (rat)

ECOLOGICAL INFORMATION

	Readily metabolized (biological 1/2-life 30-40 min); cannot bio accumulate
	Biodegrades readily & <i>very</i> rapidly in the presence absence of oxygen; better than 50%
	Biodegradation in 5 days — some tests show >80% degradation in 5 days & 100% in 14 days
Abiotic Degradation	Reacts with atmospheric hydroxyl (OH) radicals; its estimated 1/2-life in air is 7 hr
Mobility in soil, water	Water soluble; moves readily through soil & the water column; <i>rapid biodegradation limits</i>
<i>Movement</i>	
Marine Toxicity	
LC ₅₀ (Fish 96 hr)	
EC ₅₀ (Crustacea, 24hr)	
TGK 5% (Crustacea, 48hr)	
EC ₅₀ (Algae)	<i>Data below indicates extremely low marine toxicity</i>
TGK 3%* (Algae)	51,000-57,000mg/liter (Oncorhynchus mykiss), >10,000mg/liter (Leuciscus idus & Idus idus, 48hr)
TGK 5%* (Flagellates)	>10,000mg/liter (Daphnia magna) >10,000mg/liter (Chilomonas paramecium & Uronema parduczi) 46,000mg/liter (Braciomonas submarina) — <i>but some algae grow better with glycerol . . .</i> >10,000mg/liter (Scenedesmus quadricauda), 2900mg/liter (Microcistis aeruginosa) >10,000mg/liter (Chilomonas paramecium & Uronema parduczi), 3200mg/liter (Enterosyphon sulcatum)
Bioaccumulation	>10,000mg/liter (Pseudomonas putida) — <i>not an EC₅₀, but an EC₀; no inhibition seen</i>
Biodegradation	>10,000mg/liter (Pseudomonas putida)
EC ₀ (Bacteria)	
TGK 3%* (Bacteria)	

TGK is the threshold concentration for 3% or 5% decrease in optical density

DISPOSAL CONSIDERATIONS

Waste Disposal **do not flush to sewer**; mix with flammable waste and incinerate in approved facility with flue gas monitoring and scrubbing; may be landfilled if local regulations permit

Containers **Drums** should be reused. Recondition and pressure test by a licensed preconditioner prior to re-use.

Pails must be vented and thoroughly dried prior to crushing and recycling.

IBCs (intermediate bulk containers): polyethylene bottle must be pressure tested & recertified at 30 months.

Replace at 60 months (5 years). Steel containers must be inspected, pressure tested & recertified every 5 years.

Warning: never cut, drill, weld or grind on or near this container, even if empty.

USA 49 CFR & Canada TDG

Product Identification Number

Shipping Name

Classification

Marine Pollution

ERAP Required

UN — not regulated for transport

not regulated for transport

not regulated for transport

not a marine pollutant

No

EwocEivcytivFoRmetrimy

In Canada

Call CANUTEC (collect) (613) 996-6666

In the U.S.A.

Call INFOTRAC (800-535-5053)

Canada DSL

on inventory

U.S.A. TSCA

on inventory

Europe EINECS

on inventory

This very common substance is on most national chemical inventories.

Europe Classification

not classified as hazardous

U.S.A. Regulations:

Allowable Tolerances: Residues resulting from the use of the following substances as either an inert or an active ingredient in a pesticide chemical formulation, including antimicrobial pesticide chemicals, are exempted from the requirement of a tolerance under FFDC A section 408, if such use is in accordance with good agricultural or manufacturing practices. Glycerin is included on this list.

OSHA Standards: Permissible Exposure Limit: Table Z-1 8-hr Time Weighted Avg: 15 mg/cu m. /Mist, total dust/ Permissible Exposure Limit: Table Z-1 8-hr Time Weighted Avg: 5 mg/cu m. /Mist, respirable fraction/ Vacated 1989 OSHA PEL TWA 10 mg/cu m is still enforced in some states. /Mist, total/ Vacated 1989 OSHA PEL TWA 5 mg/cu m is still enforced in some states. /Mist, resp/

NIOSH Recommendations: NIOSH concluded that the documentation cited by OSHA was inadequate to support the proposed PEL (as an 8 hour TWA) of 10 mg/m³ for glycerine (mist).

Threshold Limit Values: 8 hr Time Weighted Avg (TWA): 10 mg/m³. /Glycerin mist/ Excursion Limit Recommendation: Excursions in worker exposure levels may exceed 3 times the TLV-TWA for no more than a total of 30 minutes during a work day, and under no circumstances should they exceed 5 times the TLV-TWA, provided that the TLV-TWA is not exceeded. /Glycerin mist/ 2011 Notice of Intended Changes: These substances, with their corresponding values and notations, comprise those for which (1) a limit is proposed for the first time, (2) a change in the Adopted value is proposed, (3) retention as an NIC is proposed, or (4) withdrawal of the Documentation and adopted TLV is proposed. In each case, the proposals should be considered trial values during the period they are on the NIC. These proposals were ratified by the ACGIH Board of Directors and will remain on the NIC for approximately one year following this ratification. If the Committee neither finds nor receives any substantive data that changes its scientific opinion regarding an NIC TLV, the Committee may then approve its recommendation to the ACGIH Board of Directors for adoption. If the Committee finds or receives substantive data that change its scientific opinion regarding an NIC TLV, the Committee may change its recommendation to the ACGIH Board of Directors for the matter to be either retained on or withdrawn from the NIC. Substance: Glycerin, mist (56-81-5); Withdraw adopted Documentation and TLV.

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REGULATIONS, Continued

Atmospheric Standards: This action promulgates standards of performance for equipment leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI). The intended effect of these standards is to require all newly constructed, modified, and reconstructed SOCMI process units to use the best demonstrated system of continuous emission reduction for equipment leaks of VOC, considering costs, non air quality health and environmental impact and energy requirements. Glycerol is produced, as an intermediate or a final product, by process units covered under this subpart.

FIFRA Requirements: Residues resulting from the use of the following substances as either an inert or an active ingredient in a pesticide chemical formulation, including antimicrobial pesticide chemicals, are exempted from the requirement of a tolerance under FFDCA section 408, if such use is in accordance with good agricultural or manufacturing practices. Glycerin is included on this list. As the federal pesticide law FIFRA directs, EPA is conducting a comprehensive review of older pesticides to consider their health and environmental effects and make decisions about their future use. Under this pesticide reregistration program, EPA examines health and safety data for pesticide active ingredients initially registered before November 1, 1984, and determines whether they are eligible for reregistration. In addition, all pesticides must meet the new safety standard of the Food Quality Protection Act of 1996. Pesticides for which EPA had not issued Registration Standards prior to the effective date of FIFRA, as amended in 1988, were divided into three lists based upon their potential for human exposure and other factors, with List B containing pesticides of greater concern and List D pesticides of less concern. Glycerol is found on List D. Case No: 4044; Case Status: No products containing the pesticide are actively registered ... The case /is characterized/ as "cancelled." Under FIFRA, pesticide producers may voluntarily cancel their registered products. EPA also may cancel pesticide registrations if registrants fail to pay required fees or make/meet certain reregistration commitments, or if EPA reaches findings of unreasonable adverse effects.; Active ingredient (AI): Glycerol; AI Status: The active ingredient is no longer contained in any registered pesticide products ... "cancelled."

FDA Requirements: Substances migrating to food from paper and paperboard products used in food packaging that are generally recognized as safe for their intended use, within the meaning of section 409 of the Act: Glycerin is included on this list. Glycerin used as a multiple purpose GRAS food substance in food for human consumption is generally recognized as safe when used in accordance with good manufacturing practice. Glycerin used as a general purpose food additive in animal drugs, feeds, and related products is generally recognized as safe when used in accordance with good manufacturing or feeding practice.