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MATERIAL SAFETY DATA SHEET DIANEX® EMULSIFIABLE CONCENTRATE FOR TOBACCO

Manufacturer:	Wellmark International
Address:	1100 East Woodfield Road, Suite 500 Schaumburg, IL 60173
Emergency Phone:	1-800-248-7763
Transportation Emergency Phone:	CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Dianex ®Emulsifiable Concentrate for Tobacco

Chemical Name/Synonym:	(S)-Methoprene;Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4- dodecadienoate
Chemical Family:	Terpenoid
Formula:	C ₁₉ H ₃₄ O ₃
EPA Registration No.:	2724-427
RF Number:	9811

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	<u>CAS</u> Number	<u>Weight</u>	Tolerance
(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl- 2,4-dodecadienoate	65733-16-6	33.6%	Not established
Other ingredients: (nonhazardous and/or trade secret)		66.4%	Not established
Hydrotreated light petroleum distillate	64742-47-8		Not established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

Caution; Keep out of the reach of children. Causes moderate eye irritation. Harmful if absorbed through skin. Avoid contact with eyes, skin, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

No adverse reactions have resulted from normal human exposure during research and testing.

PRIMARY ROUTE OF	ENTRY	Dermal/Eye:	Yes	Oral:	Yes	Inhalation: No
ACUTE TOXICITY	Oral:	LD50 (rat):	>34,000 m	ng/kg (HDT) (B	ased or	n (S)-Methoprene)
	Dermal:	LD50 (rat):	>2,000 mg	g/kg (HDT) (Ba	sed on	(S)-Methoprene)
	Inhalation:	LC50 (rat) 2	210mg/l aii	r (Based on RS	S-Metho	prene)

OTHER TOXICOLOGICAL INFORMATION

OTHER TOXICOLOGICAL INFOR	MATION	
Skin Irritation:	Non-irritating (rabbit) (Based on (S) Methoprene)	
Eye Irritation:	Practically non-irritating (rabbit) (Based on (S) Methoprene)	
Sensitizer:	Not a sensitizer (guinea pig) (Based on (RS) Methoprene)	
4. FIRST AID MEASURES		
Eye:	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes. Call a poison control center or doctor for treatment advice.	
Skin:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.	
Ingestion:	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.	
Inhalation:	Move to well ventilated area. Clear airway and support respiration if necessary. Seek medical attention.	
Note to Physician:	Contains petroleum distillate – vomiting may cause aspiration pneumonia.	
5. FIRE FIGHTING MEASURES		
NFPA Rating:	Health: 0 Fire: 2 Reactivity: 0	
Flammability Class:	Combustible liquid	
Flash Point:	191°F, 88.3°C	
Explosive Limits (% of Volume):	Upper: No data; Lower: No data	
Extinguishing Media:	Water, fog, foam, dry chemical or carbon dioxide	
Special Protective Equipment:	Firefighters should wear full protective clothing including self contained breathing apparatus.	
Fire Fighting Procedures:	Normal procedures. Do not allow fire fighting water to escape into waterways or sewers.	
Combustion Products:	Carbon dioxide, carbon monoxide	
Unusual Fire/Explosion Hazards:	None	
6. ACCIDENTAL RELEASE MEASUR	ES	
Steps to be taken:	Cover with inert absorbent. Avoid contact with heat or open flame. Avoid breathing vapors. Provide ventilation and avoid skin contact. Place all material in metal drum that can be effectively sealed. Do not contaminate surface or domestic water supply.	
Absorbents:	Clay granules, sawdust, dirt or equivalent.	

Incompatibles: Oxidizers

7. HANDLING AND STORAGE

Handling: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of the gloves before removing. Then wash thoroughly and change into clean clothing.

Storage: Do not contaminate water, food, or feed by storage. Store in a cool dry place.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits:	Not applicable
Ventilation:	Use with adequate ventilation.
Personal Protective Equipment:	Under normal use, special protective equipment is not needed. If extended exposure is anticipated, it is recommended to wear a MSHA/NIOSH approved respirator with organic vapor cartridge, impervious gloves and chemical goggles or safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Amber liquid, aromatic solvent odor.
Boiling Point:	greater than 218°C
Melting Point:	Not applicable
Vapor Pressure (mm Hg):	< 0.1 mm Hg
Vapor Density (Air = 1):	< 5.9
Specific Gravity:	0.858
Bulk Density:	7.1 lbs/gal
Solubility:	Forms emulsion in water
Evaporation Rate:	< 0.01 (n-Butyl acetate = 1.0)
pH:	6.69

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	Oxidizers
Decomposition Products:	Carbon dioxide, carbon monoxide
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Based on (RS)-Methoprene]

Methoprene is not considered as an oncogenic compound. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS)-Methoprene]

Methoprene is not a teratogenic compound. The NOEL for maternal and embryo toxicity in rabbits was 200/mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

MUTAGENICITY [Based on (RS)-Methoprene]

Methoprene is not a mutagenic compound.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Based on (RS) Methoprene Technical]

Hydrolysis:	11/2 > 4 weeks
Photolysis:	T1/2 < 10 hours
Soil half life:	~ 10 days
	. 0

Water solubility: < 2 ppm

ECOTOXICITY [Based on (S)-Methoprene]

Acute Toxicity: fish:LC50 (trout): 760 ppb, (bluegill): > 370 ppb aquatic invertebrates:LC50 (Daphnia): 360 ppb

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by disposal. **Pesticide Disposal** –Wasts resulting from use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal** – **[Metal Containers**] Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **[Plastic Containers]:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. **[Plastic Containers]:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke. **[Glass Containers]:** Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures

14. TRANSPORT INFORMATION

DOT49CFR Description: Not Applicable

Freight Classification: Insecticides N.O.I O/T Poison NMCF 1-102120 CL 60

15. REGULATORY INFORMATION

CERCLA (Superfund): Ninate 401-A (dodecylbenzene sulfonic acid, calcium salt) – RQ = 10 lbs.

- Cas#26264-06-2
- **RCRA:** Regulated due to ignitability (D001)

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes (irritant)

Delayed Health: No Fire: Yes (combustible liquid) Sudden Pressure: No Reactivity: No

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.