



SAFETY DATA SHEET

Issue Date 26-Aug-2013

Revision Date 02-May-2018

Version 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name E-cryl® 4163

Other means of identification

SDS# JC-010-004

Details of the supplier of the safety data sheet

Emulsion Systems
6531 Park of Commerce Boulevard
Suite 170
Boca Raton, FL 334787
561-939-2000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Not classified
Acute toxicity - Dermal	Not classified

Label elements

Emergency Overview

Hazard statements

Harmful to aquatic life with long lasting effects

Appearance Opaque

Physical state Liquid

Odor Mild

Precautionary Statements - Prevention

Avoid release to the environment

Precautionary Statements - Response

Specific Treatment (See Section 4 on the SDS)

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Other Information

Unknown Acute Toxicity

25.3765% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Zinc oxide	1314-13-2	1-5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Skin Contact	Wash skin with soap and water.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms Any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No Information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines Exposure guidelines noted for ingredients.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc oxide 1314-13-2	STEL: 10 mg/m ³ respirable fraction TWA: 2 mg/m ³ respirable fraction	TWA: 5 mg/m ³ fume TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ fume (vacated) TWA: 10 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) STEL: 10 mg/m ³ fume	IDLH: 500 mg/m ³ Ceiling: 15 mg/m ³ dust TWA: 5 mg/m ³ dust and fume STEL: 10 mg/m ³ fume
2-(2-methoxypropoxy)propanol 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m ³ (vacated) S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m ³ STEL: 150 ppm STEL: 900 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers, Eyewash stations & Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special technical protective measures are necessary.

Skin and body protection No special technical protective measures are necessary. Wear protective gloves and protective clothing. Prolonged contact may cause redness and irritation. Wear protective gloves and protective clothing if needed.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Opaque
Color	White
Odor	Mild
Odor threshold	No Information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8.0-8.6	
Specific Gravity	1.055	
Viscosity	Water Thin	
Melting point/freezing point	No Information available	
Flash point	No Information available	
Boiling point / boiling range	212 F	
Evaporation rate	No Information available	
Flammability (solid, gas)		
Flammability Limits in Air		
Upper flammability limit:	Not Applicable	
Lower flammability limit:	Not Applicable	
Vapor pressure	No Information available	
Vapor density	No Information available	
Water solubility	Complete	
Partition coefficient	No Information available	
Autoignition temperature	No Information available	
Decomposition temperature	No Information available	

Other Information

Density Lbs/Gal	8.80
VOC Content (%)	7.85

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

Inhalation	No data available. May cause irritation of respiratory tract. May cause possibly severe irritation of the respiratory tract.
Eye contact	No data available. Contact with eyes may cause irritation. Contact with eyes may cause irritation or burns. Contact with eyes may cause severe irritation and possible chemical burns.
Skin Contact	No data available. May be absorbed through the skin in harmful amounts. Prolonged contact may cause redness and irritation. Prolonged or repeated contact may cause absorption to the skin. Prolonged or repeated contact may dry skin and cause irritation.
Ingestion	No data available. Not an expected route of exposure. May cause gastro intestinal irritation. Harmful if swallowed. Ingestion may cause digestive tract irritation or corrosion, nausea and possibly bloody vomiting, bloody diarrhea and abdominal pain.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
2-(2-ethoxyethoxy)ethanol 111-90-0	= 1920 mg/kg (Rat)	= 4200 µL/kg (Rabbit) = 6 mL/kg (Rat)	> 5240 mg/m ³ (Rat) 4 h
Zinc oxide 1314-13-2	> 5000 mg/kg (Rat)	Yes	Yes
2-(2-methoxypropoxy)propanol 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	Yes

Information on toxicological effects

Symptoms No Information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No Information available.
Germ cell mutagenicity	No Information available.
Carcinogenicity	No Information available.
Reproductive toxicity	No Information available.
STOT - single exposure	No Information available.
STOT - repeated exposure	No Information available.
Target organ effects	Central nervous system, EYES, Respiratory system.
Aspiration hazard	No Information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 25.3765% of the mixture consists of ingredient(s) of unknown toxicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

37.38296% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Tributoxyethyl Phosphate 78-51-3	Yes	10.4 - 12.0: 96 h Pimephales promelas mg/L LC50 flow-through	Yes

2-(2-ethoxyethoxy)ethanol 111-90-0	Yes	10000: 96 h Lepomis macrochirus mg/L LC50 static 19100 - 23900: 96 h Lepomis macrochirus mg/L LC50 flow-through 11400 - 15700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 11600 - 16700: 96 h Pimephales promelas mg/L LC50 flow-through 13400: 96 h Salmo gairdneri mg/L LC50 flow-through	3940 - 4670: 48 h Daphnia magna mg/L EC50
[2-(2-Methoxymethylethoxy)methylethoxy]-propanol 25498-49-1	Yes	11619: 96 h Pimephales promelas mg/L LC50 static	10: 48 h Daphnia magna mg/L EC50
2-(2-methoxypropoxy)propanol 34590-94-8	Yes	10000: 96 h Pimephales promelas mg/L LC50 static	1919: 48 h Daphnia magna mg/L LC50
Methyl Chloro Isothiazolinone 26172-55-4	0.11 - 0.16: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.03 - 0.13: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.31: 120 h Anabaena flos-aquae mg/L EC50	1.6: 96 h Oncorhynchus mykiss mg/L LC50 semi-static	4.71: 48 h Daphnia magna mg/L EC50 0.12 - 0.3: 48 h Daphnia magna mg/L EC50 Flow through 0.71 - 0.99: 48 h Daphnia magna mg/L EC50 Static
Magnesium Chloride 7786-30-3	2200: 72 h Desmodesmus subspicatus mg/L EC50	1970 - 3880: 96 h Pimephales promelas mg/L LC50 static 4210: 96 h Gambusia affinis mg/L LC50 static	140: 48 h Daphnia magna mg/L EC50 Static 1400: 24 h Daphnia magna mg/L EC50

Persistence and degradability

No Information available.

Bioaccumulation

No Information available.

Other adverse effects

No Information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc oxide 1314-13-2	Toxic

14. TRANSPORT INFORMATION

The basic description below is specific to the container size. This information is provided for at a glance DOT information. Please refer to the container and/or shipping papers for the appropriate shipping description before tendering this material for shipment. For additional information, please contact the distributor listed in section 1 of this SDS.

DOT

Not regulated

15. REGULATORY INFORMATION**International Inventories****TSCA**

Complies

DSL/NDSL	Complies
NZIoC	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
NZIoC - New Zealand Inventory of Chemicals
AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
2-(2-ethoxyethoxy)ethanol - 111-90-0	1.0
[2-(2-Methoxymethylethoxy)methylethoxy]-propanol - 25498-49-1	1.0
Zinc oxide - 1314-13-2	1.0
2-(2-methoxypropoxy)propano - 34590-94-8	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains one or more substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc oxide 1314-13-2	Yes	X	Yes	Yes

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-(2-ethoxyethoxy)ethanol 111-90-0	X	Yes	X
[2-(2-Methoxymethylethoxy)methylethoxy] -propanol 25498-49-1	X	Yes	X
Zinc oxide 1314-13-2	X	X	X
2-(2-methoxypropoxy)propano 34590-94-8	X	X	X
Magnesium Nitrate 10377-60-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<u>NFPA</u>	Health hazards 0	Flammability 0	Instability 0	Physical and Chemical Properties Yes
<u>HMIS</u>	Health hazards 0	Flammability 0	Physical hazards 0	Personal protection A

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Revision Note	Update to Section 15

No Information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

End of Safety Data Sheet