

SAFETY DATA SHEET

Issuing Date: 01-Dec-2015

Version 1

Emerald® Premium DPO

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Emerald® Premium DPO

Product code 900015819

Product Use Fountain Solution for Heatset Web.

Manufactured by
FUJIFILM Hunt Chemicals U.S.A., Inc.
40 Boroline Road
Allendale, NJ 07401-0320

Distributed in the USA by
FUJIFILM North American Corporation,
Graphic Systems Division
200 Summit Lake Drive
Valhalla, NY 10595-1356

Distributed in Canada by
FUJIFILM Canada, Inc.
600 Suffolk Ct.
Mississauga, Ontario L5R 4G4

Distributed Internationally by
FUJIFILM Hunt Chemicals U.S.A., Inc.
40 Boroline Road
Allendale, NJ 07401-0320

SDSs are available at the following website(s): <http://www.fujifilmusa.com/msds>

Company Phone Number U.S.A: 800-473-3854 Canada: 800-263-5018

Emergency Telephone Transport-CHEMTREC Inside NA: 800-424-9300
Transport CHEMTREC Outside NA: 703-527-3887
Transport-CANUTEC Inside Canada: 613-996-6666
Medical Emergency (24 hour): 877-935-7387

E-mail EHS@fujifilm.com

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

GHS Label elements, including precautionary statements

Warning

Hazard Statements

May cause damage to organs through prolonged or repeated exposure

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction



Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Contaminated work clothing should not be allowed out of the workplace

Response

Get medical advice/attention if you feel unwell

If exposed or concerned: Get medical advice/attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If eye irritation persists: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water

If skin irritation or rash occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Storage

Not applicable

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not classified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
DIETHYLENE GLYCOL BUTYL ETHER	112-34-5	5-10%
GLYCERINE	56-81-5	3-7%
ETHYLENE GLYCOL	107-21-1	3-7%
SODIUM XYLENE SULFONATE	1300-72-7	1-5%
AMMONIUM NITRATE	6484-52-2	1-5%
MALIC ACID	6915-15-7	1-5%
ACETYLENIC DIOL	126-86-3	0.1-1%

4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice	If symptoms persist, call a physician.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	If swallowed, do not induce vomiting - seek medical advice.
Protection of First-aiders	Use personal protective equipment.

Most important symptoms/effects, acute and delayed

May cause redness, itching, and pain. May cause allergic skin reaction.

Indication of immediate medical attention and special treatment needed, if necessary

May cause sensitization of susceptible persons. 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

None known.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. May cause sensitization by skin contact.

Hazardous Combustion Products

Carbon oxides. Sulfur oxides. Nitrogen oxides (NOx). Ammonia.

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**

Use personal protective equipment. Avoid contact with the skin and the eyes. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods and materials for containment and cleaning up

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

Methods for cleaning up Use personal protective equipment. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
DIETHYLENE GLYCOL BUTYL ETHER	TWA: 10 ppm inhalable fraction and vapor			
GLYCERINE		TWA: 15 mg/m ³ mist, total particulate TWA: 5 mg/m ³ mist, respirable fraction (vacated) TWA: 10 mg/m ³ mist, total particulate (vacated) TWA: 5 mg/m ³ mist, respirable fraction		
ETHYLENE GLYCOL	Ceiling: 100 mg/m ³ aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³		

Exposure controls

Engineering Measures Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles. Face-shield.

Skin and body protection Wear protective gloves/clothing.

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 Considerations When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Clear, Green	Odor	Mild
Odor Threshold	Not available	Physical State @20°C	Liquid
pH	4.30	Molecular Weight	Not available
Specific Gravity	1.09	Autoignition temperature	Not available
Flash point	> 201 °F / > 94 °C	Boiling point / boiling range	> 212 °F / > 100 °C
Decomposition temperature	Not available	Freezing Point	Not available
Melting point / melting range	Not available		
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	Explosive Properties	Not available
Solubility	completely soluble	Partition coefficient	Not available
Evaporation rate	Not available	Vapor Pressure	Not available
Vapor density	Not available	Density	Not available
VOC (lb/gal)	1.21	VOC (g/l)	145.14
Dynamic viscosity	Not available		

10. STABILITY AND REACTIVITY

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Excessive heat. Freezing. This product contains an ammonia compound. Do not allow this solution to come in contact with household or industrial bleaches (Sodium Hypochlorite). Mixing of these chemicals can result in the release of hazardous or toxic gases. Inhalation of these gases may cause severe respiratory irritation.

Incompatible Materials

Strong oxidizing agents. Strong acids. Strong bases. Sodium hypochlorite.

Hazardous Decomposition Products

None known.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

Inhalation

Inhalation of vapors in high concentration may cause irritation of respiratory system.

Eyes

Irritating to eyes. May cause redness and tearing.

Skin

Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion

Ingestion may cause stomach discomfort.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
DIETHYLENE GLYCOL BUTYL ETHER	= 3384 mg/kg (Rat)	= 2700 mg/kg (Rabbit)	
GLYCERINE	= 12600 mg/kg (Rat)	21900 mg/kg (Rat)	> 570 mg/m ³ (Rat) 1 h
ETHYLENE GLYCOL	4000 - 10200 mg/kg (Rat)	= 9530 µL/kg (Rabbit) = 10600 mg/kg (Rat)	-
SODIUM XYLENE SULFONATE	= 1000 mg/kg (Rat)		
AMMONIUM NITRATE	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat) 4 h

Information on toxicological effects

No information available.

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

Irritation	Irritating to eyes. Irritating to skin.
Corrosivity	No information available.
Sensitization	May cause sensitization by skin contact.
Mutagenic Effects	No information available.
Reproductive Toxicity	No information available.
Carcinogenicity	None known.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to kidneys through prolonged or repeated exposure if swallowed.

Target Organ Effects Central nervous system (CNS), Eyes, Kidney, Respiratory system, Skin.

Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	6290 mg/kg
ATEmix (dermal)	30553 mg/kg

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ETHYLENE GLYCOL		Pimephales promelas: 40000 - 60000 mg/L at 96 h		

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Octanol Water Partition Coefficient (log pow)
GLYCERINE	-1.76
ETHYLENE GLYCOL	-1.93
AMMONIUM NITRATE	-3.1

Mobility

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of in accordance with local regulations.

Contaminated packaging

Do not re-use empty containers.

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>TDG</u>	Not regulated
<u>MEX</u>	Not regulated
<u>ICAO</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	Not regulated
<u>ADR/RID</u>	Not regulated
<u>ADN</u>	Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Yes
DSL/NDL	Yes
PICCS	No
EINECS/ELINCS	No
ENCS	No
IECSC	No
KECL	No
AICS	No

***Yes - All component(s) of this product are included or are exempt from listing on the inventory.**

***No - Indicates the component(s) of this product are either not listed or have not been determined to be listed on the inventory.**

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

U.S. Federal Regulations

TSCA Sections 4, 5 and 12(b)

This product does not contain any chemicals regulated by TSCA Sections 4, 5 or 12(b).

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	CAS No	SARA 313 - Threshold Values %	Weight-%
DIETHYLENE GLYCOL BUTYL ETHER	112-34-5	1.0	5-10%
ETHYLENE GLYCOL	107-21-1	1.0	3-7%
AMMONIUM NITRATE	6484-52-2	1.0	1-5%

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	no
Sudden Release of Pressure Hazard	no
Reactive Hazard	no

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ETHYLENE GLYCOL	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
DIETHYLENE GLYCOL BUTYL ETHER		X	X	X	
GLYCERINE	X	X	X		X
ETHYLENE GLYCOL	X	X	X	X	X
AMMONIUM NITRATE	X	X	X	X	X

International Regulations

Canada - NDSL

Chemical Name	NDSL
METHYLENE DIUREA 68611-64-3	X

Mexico - Grade
Slight risk, Grade 1

Mexico - Carcinogen Status and Exposure Limits

Chemical Name	Carcinogen Status	Exposure Limits
GLYCERINE		Mexico: TWA 10 mg/m ³
ETHYLENE GLYCOL		Mexico: Ceiling 100 mg/m ³

Other Regulations
No information available

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 1	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2	Flammability 1	Physical Hazard 0	Personal protection B

Prepared By FUJIFILM Environment, Health and Safety, phone: 800-473-3854

Revision Date 01-Dec-2015

Revision Note 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.**

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