FUJIFILM

900015452

SAFETY DATA SHEET

Issuing Date: 01-Dec-2015 **Version** 1

Emerald® JRHZ

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Emerald® JRHZ

Product code 900015452

Product Use Acid Fountain Solution for Offset Printing.

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

GHS Label elements, including precautionary statements

Warning

Hazard Statements
Causes skin irritation
Causes serious eye irritation

Precautionary Statements

Prevention
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Response
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 occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Storage
Not applicable

Disposal
Not applicable

Hazards not otherwise classified (HNOC)
Not classified

Other hazards
May be harmful if swallowed
Harmful to aquatic life with long lasting effects
Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	5-10%
AMMONIUM NITRATE	6484-52-2	1-5%
ACETIC ACID	64-19-7	1-5%

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.

Most important symptoms/effects, acute and delayed

May cause redness, itching, and pain.

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

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

None known.

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 skin, eyes or clothing. 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 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. Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and 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
ETHYLENE GLYCOL MONOBUTYL ETHER	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m^3 (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m^3 (vacated) S* S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m^3	
ACETIC ACID	STEL: 15 ppm TWA: 10 ppm	TWA: 10 ppm TWA: 25 mg/m^3 (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m^3	IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m^3 STEL: 15 ppm STEL: 37 mg/m^3	

Exposure controls

Engineering Measures Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

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	3.25 - 3.40		
Specific Gravity	1.064 - 1.069	**Molecular Weight**	Not available
Flash point	> 201 °F / > 94 °C	**Autoignition temperature**	Not available
Decomposition temperature	Not available	**Boiling point / boiling range**	> 212 °F / > 100 °C
Melting point / melting range	Not available	**Freezing Point**	Not available
Flammability Limit in Air	Not available		
Oxidizing Properties	Not available	**Explosive Properties**	Not available
Solubility	Miscible with water	**Partition coefficient**	Not available

Evaporation rate	Not available	**Vapor Pressure**	Not available
Vapor density	Not available	**Density**	Not available
VOC (lb/gal)	1.92	**VOC (g/l)**	230.3
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.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
ETHYLENE GLYCOL MONOBUTYL ETHER	= 470 mg/kg (Rat)	400 mg/kg (Rabbit) 2270 mg/kg (Rat)	= 450 ppm (Rat) 4 h
AMMONIUM NITRATE	= 2217 mg/kg (Rat)		> 88.8 mg/L (Rat) 4 h
ACETIC ACID	600 mg/kg (Rabbit) [NZ CCID]	1060 mg/kg (Rabbit)	11.4 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	No information available.
Mutagenic Effects	No information available.
Reproductive Toxicity	No information available.
Carcinogenicity	None known.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects Blood, Central nervous system (CNS), Eyes, Hematopoietic System, Kidney, Liver, Respiratory system, Skin, Teeth.

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) 4808 mg/kg
ATEmix (dermal) 10444 mg/kg
ATEmix (inhalation-dust/mist) 17 mg/l

ATE: Acute toxicity estimate

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Chemical Name	Algae toxicity	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
ACETIC ACID		Pimephales promelas: 79 mg/L at 96 h		65: 48 h Daphnia magna mg/L EC50 Static

Persistence and degradability

No information available.

Bioaccumulation

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Chemical Name	Octanol Water Partition Coefficient (log pow)
ETHYLENE GLYCOL MONOBUTYL ETHER	0.81
AMMONIUM NITRATE	-3.1
ACETIC ACID	-0.31

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

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG Not regulated

ADR/RID Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	Yes
DSL/NDSL	No
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-%
ETHYLENE GLYCOL MONOBUTYL ETHER	111-76-2	1.0	5-10%
AMMONIUM NITRATE	6484-52-2	1.0	1-5%

SARA 311/312 Hazard Categories

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

Clean Water Act

This product contains the following substances which are regulated 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
ACETIC ACID	5000 lb			X

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
ACETIC ACID	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

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Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
ETHYLENE GLYCOL MONOBUTYL ETHER	X	X	X	X	X
AMMONIUM NITRATE	X	X	X	X	X
ACETIC ACID	X	X	X		X

International Regulations

Canada - NDSL

This product does not contain any NDSL chemicals.

Mexico - Grade

Slight risk, Grade 1

Mexico - Carcinogen Status and Exposure Limits

Chemical Name	Carcinogen Status	Exposure Limits
ETHYLENE GLYCOL MONOBUTYL ETHER		Mexico: TWA 26 ppm Mexico: TWA 120 mg/m^3 Mexico: STEL 75 ppm Mexico: STEL 360 mg/m^3
ACETIC ACID		Mexico: TWA 10 ppm Mexico: TWA 25 mg/m^3

		Mexico: STEL 15 ppm Mexico: STEL 37 mg/m³

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
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