

# SAFETY DATA SHEET

Issuing Date: 16-Jan-2015

Version 3

## Dirasol Emulsion Sensitizer

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Dirasol Emulsion Sensitizer

**Product code** DIR-SEN

**Product Use** Chemical additive.

**Distributed in the USA by**  
FUJIFILM Manufacturing U.S.A., Inc.  
20 West 14th Avenue  
North Kansas City, MO. 64116 USA  
Phone#: (913) 342-4060

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

**MSDS 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

Acute Toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

#### GHS Label elements, including precautionary statements

Danger

#### Hazard Statements

Harmful if swallowed  
Causes severe skin burns and eye damage



### Precautionary Statements

#### **Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Wear protective gloves/protective clothing/eye protection/face protection

#### **Response**

Immediately call a POISON CENTER or doctor/physician  
 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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

#### **Storage**

Store locked up

#### **Disposal**

Dispose of contents/container to an approved waste disposal plant

#### **Hazards not otherwise classified (HNOC)**

Not classified

#### **Other hazards**

May be harmful in contact with skin

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
phosphoric acid	7664-38-2	40-60%
Benzenediazonium, 4-(phenylamino)-, sulfate (1:1), polymer with formaldehyde	41432-19-3	40-60%

### 4. FIRST AID MEASURES

#### **First aid measures for different exposure routes**

##### **General advice**

Immediate medical attention is required. If symptoms persist, call a physician.

##### **Eye contact**

In case of contact with substance, immediately flush eyes with running water for at least 30 minutes. Keep eye wide open while rinsing. Do not rub affected area. Call a physician immediately.

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<b>Skin contact</b>	Wash off immediately with plenty of water for at least 30 minutes. Remove contaminated clothing and shoes. Call a physician immediately.
<b>Inhalation</b>	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Ingestion</b>	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/ physician.
<b>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes or clothing.

**Most important symptoms/effects, acute and delayed**

Causes severe skin burns and eye damage. Burning feeling and temporary redness.

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

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

## 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. Alcohol resistant foam.

**Unsuitable Extinguishing Media**

None known.

**Specific hazards arising from the chemical**

None known.

**Hazardous Combustion Products**

Carbon oxides. Nitrogen oxides (NO<sub>x</sub>).

**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**

Do not allow material to contaminate ground water system. Should not be released into the environment. 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** Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.

**Methods for cleaning up** Use personal protective equipment. Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

**Other information** Refer to protective measures listed in Sections 7 and 8.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

Wear personal protective equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. In case of insufficient ventilation, wear suitable respiratory equipment.

### Conditions for safe storage, including any incompatibilities

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

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH	AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs
phosphoric acid	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>	

### 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** Take off contaminated clothing and wash before reuse. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes or clothing. For environmental protection, remove and wash all contaminated protective equipment before re-use. Wear suitable gloves and eye/face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Viscous, Dark Brown	<b>Odor</b>	pungent
<b>Odor Threshold</b>	Not available	<b>Physical State @20°C</b>	Liquid
<b>pH</b>	1.0	<b>Molecular Weight</b>	Not available
<b>Specific Gravity</b>	1.52		

<b>Flash point</b>	> 201 °F / > 94 °C	<b>Autoignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available	<b>Boiling point / boiling range</b>	212 °F / 100 °C
<b>Melting point / melting range</b>	Not available	<b>Freezing Point</b>	Not available
<b>Flammability Limit in Air</b>	Not available		
<b>Oxidizing Properties</b>	Not available	<b>Explosive Property Details</b>	Not available
<b>Solubility</b>	Soluble in water	<b>Partition coefficient</b>	Not available
<b>Evaporation rate</b>	Not available	<b>Vapor Pressure</b>	17.0 mm/Hg @ 20 C
<b>Vapor density</b>	Not available	<b>Density</b>	Not available
<b>Weight per Gallon (lbs)</b>	12.65	<b>Actual VOC (lb/gal)</b>	<0.02
<b>VOC (lb/gal)</b>	Not available	<b>VOC (g/l)</b>	Not available
<b>Dynamic viscosity</b>	Not available		
<b>VOC Content California</b>			
<b>VOC Content of Material</b>		<3 grams per liter	
<b>VOC Content of Coating less Water and Exempt Solvents</b>		<4 grams per liter	

## 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

Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods.

### Incompatible Materials

Incompatible with oxidizing agents. Strong bases. Incompatible with strong acids and bases. Strong oxidizing agents.

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

#### Product Information

#### **Acute toxicity**

##### **Inhalation Eyes**

May cause irritation of respiratory tract. Harmful by inhalation. May be harmful if inhaled. Causes burns. Corrosive to the eyes and may cause severe damage including blindness. Risk of serious damage to eyes.

##### **Skin Ingestion**

Causes burns. Harmful if swallowed. Ingestion may cause irritation to mucous membranes. Can burn mouth, throat, and stomach. Ingestion causes burns of the upper digestive and respiratory tracts.

#### Component Information

Chemical Name	Oral LD50	Dermal LD50	LC50 (lethal concentration)
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phosphoric acid	= 1530 mg/kg ( Rat )	2730 mg/kg ( Rabbit )	850 mg/m <sup>3</sup> ( Rat ) 1 h
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**Information on toxicological effects**

No information available.

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

<b>Irritation</b>	Non-irritating during normal use.
<b>Corrosivity</b>	Causes burns.
<b>Sensitization</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>Carcinogenicity</b>	None known.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Avoid repeated exposure. Possible risks of irreversible effects.
<b>Target Organ Effects</b>	Eyes, Respiratory system, Skin.
<b>Aspiration hazard</b>	No information available.

**Numerical measures of toxicity - Product Information**

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

<b>ATEmix (oral)</b>	1809 mg/kg
<b>ATEmix (dermal)</b>	3271 mg/kg
<b>ATEmix (inhalation-vapor)</b>	1650 mg/l

ATE: Acute toxicity estimate

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Contains no substances known to be hazardous to the environment or that are not degradable in wastewater treatment plants

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available

**Mobility**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging**

Do not re-use empty containers.

**US EPA Waste Number**

D002

<b>14. TRANSPORT INFORMATION</b>
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**DOT**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Reportable Quantity (RQ)</b>	Phosphoric acid: RQ kg= 5044.44
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III, RQ
<b>Emergency Response Guide Number</b>	154
<b>Packaging Exceptions</b>	154
<b>Non-bulk Packaging</b>	203
<b>Bulk Packaging</b>	241

**TDG**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III

**MEX**

<b>Proper Shipping Name</b>	Phosphoric acid, solution
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III

**ICAO**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III

**IATA**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III

**IMDG**

<b>Proper Shipping Name</b>	Phosphoric acid solution
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>EmS-No</b>	F-A, S-B
<b>Description</b>	UN1805, Phosphoric acid solution, 8, III

**ADR/RID**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III



<b>Classification Code</b>	C1
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III, (E)

**ADN**

<b>Proper Shipping Name</b>	PHOSPHORIC ACID, SOLUTION
<b>UN/ID No</b>	UN1805
<b>Hazard Class</b>	8
<b>Packing Group</b>	III
<b>Classification Code</b>	C1
<b>Description</b>	UN1805, Phosphoric acid, solution, 8, III
<b>Limited quantity</b>	5 L

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

<b>TSCA</b>	Yes
<b>DSL/NDSL</b>	Yes
<b>PICCS</b>	Yes
<b>EINECS/ELINCS</b>	No
<b>ENCS</b>	No
<b>IECSC</b>	No
<b>KECL</b>	Yes
<b>AICS</b>	Yes

**\*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 does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	no
<b>Sudden Release of Pressure Hazard</b>	no
<b>Reactive Hazard</b>	Yes

**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

phosphoric acid	5000 lb			X
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**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
phosphoric acid	5000		RQ 5000 lb final RQ RQ 2270 kg final RQ

**U.S. State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	California Prop. 65
methanol	Developmental
formaldehyde	Carcinogen

**U.S. State Right-to-Know Regulations**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
phosphoric acid	X	X	X		X

**International Regulations****Canada - NDSL**

Chemical Name	NDSL
Benzenediazonium, 4-(phenylamino)-, sulfate (1:1), polymer with formaldehyde 41432-19-3	X

**Mexico - Grade**

Slight risk, Grade 1

**Mexico - Carcinogen Status and Exposure Limits**

Chemical Name	Carcinogen Status	Exposure Limits
phosphoric acid		Mexico: TWA 1 mg/m <sup>3</sup> Mexico: STEL 3 mg/m <sup>3</sup>

**Other Regulations**

No information available

<b>CPSIA</b>	Formulated to comply
<b>CONEG</b>	Formulated to comply
<b>ASTM F-963</b>	Formulated to comply
<b>CHPA</b>	Formulated to comply
<b>ROHS</b>	Formulated to comply
<b>REACH/SVHC</b>	Formulated to comply
<b>EN-71</b>	Formulated to comply

**16. OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazard 3</b>	<b>Flammability 1</b>	<b>Instability 1</b>	<b>Physical and chemical hazards -</b>
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HMIS	Health Hazard 3	Flammability 1	Physical Hazard 1	Personal protection B
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**Prepared By** FUJIFILM Environment, Health and Safety, phone: 800-473-3854

**Revision Date** 16-Jan-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.**

**end**