SAFETY DATA SHEET

SUPERIA PressMax® ARS-ML Alcohol Replacement

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name
SUPERIA PressMax® ARS-ML Alcohol Replacement

Product code
900015636

Product Use
Alcohol Replacement Additive for Offset Printing.

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

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

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute Toxicity - Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1B</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 4</td>
</tr>
</tbody>
</table>
GHS Label elements, including precautionary statements

Danger

**Hazard Statements**
- Harmful if swallowed
- Harmful in contact with skin
- Harmful if inhaled
- Causes skin irritation
- Causes serious eye damage
- May cause an allergic skin reaction
- Combustible liquid

**Precautionary Statements**

**Prevention**
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Contaminated work clothing should not be allowed out of the workplace
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking

**Response**
- Immediately call a POISON CENTER or doctor/physician
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- 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
- 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
- In case of fire: Use CO2, dry chemical, or foam for extinction

**Storage**
- Store in a well-ventilated place. Keep cool

**Disposal**
- Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**
- Not classified

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>111-76-2</td>
<td>70-90%</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

First aid measures for different exposure routes

General advice
Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray. May cause allergic skin reaction. 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.

Skin contact
IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation
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.

Ingestion
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

Protection of First-aiders
Use personal protective equipment.

Most important symptoms/effects, acute and delayed
May cause redness, itching, and pain. Burning feeling and temporary redness. May cause allergic skin reaction.

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

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable Extinguishing Media
None known.

Specific hazards arising from the chemical
Combustible liquid. May be ignited by heat, sparks or flames. May cause sensitization by skin contact.

Explosion Data
Sensitivity to Mechanical Impact none
Sensitivity to Static Discharge Yes

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. Remove all sources of ignition. 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**

Cover liquid spill with sand, earth or other noncombustible absorbent material. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges. Use personal protective equipment. Pay attention to flashback. Use only non-sparking tools. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

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### 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 away from heat and sources of ignition. Keep in properly labeled containers. Keep containers tightly closed in a dry, cool and well-ventilated place.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
<th>AIHA - Workplace Environmental Exposure Levels (WEELs) - TWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL</td>
<td>TWA: 20 ppm</td>
<td>TWA: 50 ppm</td>
<td>IDLH: 700 ppm</td>
<td></td>
</tr>
<tr>
<td>MONOBUTYL ETHER</td>
<td></td>
<td>TWA: 240 mg/m³</td>
<td>TWA: 25 ppm</td>
<td>TWA: 7 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 25 ppm</td>
<td>(vacated) TWA: 120 mg/m³</td>
<td>TWA: 24 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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. Regular cleaning of equipment, work area and
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, Colorless</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>6 - 8</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.923</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 158 °F / &gt; 70 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point / melting range</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>Not available</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Physical State @20°C</td>
<td>Liquid</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; 212 °F / &gt; 100 °C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>completely soluble</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Not available</td>
</tr>
<tr>
<td>VOC (lb/gal)</td>
<td>6.48</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>Not available</td>
</tr>
</tbody>
</table>

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
Heat, flames and sparks.

Incompatible Materials
Strong oxidizing agents, strong acids, and strong bases. Sodium hypochlorite.

Hazardous Decomposition Products
Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Acute toxicity

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

Eyes
Corrosive to the eyes and may cause irreversible eye damage.

Skin
Harmful if absorbed through skin. Irritating to skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

Ingestion
Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
**Component Information**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>LC50 (lethal concentration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>= 470 mg/kg (Rat)</td>
<td>400 mg/kg (Rabbit)</td>
<td>= 450 ppm (Rat) 4 h</td>
</tr>
<tr>
<td></td>
<td>2270 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 skin.
- **Corrosivity**: Corrosive to eyes.
- **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**

No information available.

**Target Organ Effects**

Blood, Central nervous system (CNS), Eyes, Hematopoietic System, Kidney, Liver, 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) 584 mg/kg
- ATEmix (dermal) 1365 mg/kg
- ATEmix (inhalation-vapor) 14 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**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Octanol Water Partition Coefficient (log pow)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>0.81</td>
</tr>
</tbody>
</table>

**Mobility**

No information available.

**Other adverse effects**
No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods
Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging
Do not re-use empty containers.

14. TRANSPORT INFORMATION

<table>
<thead>
<tr>
<th>DOT</th>
<th>Not regulated</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDG</td>
<td>Not regulated</td>
</tr>
<tr>
<td>MEX</td>
<td>Not regulated</td>
</tr>
<tr>
<td>ICAO</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IATA</td>
<td>Not regulated</td>
</tr>
<tr>
<td>IMDG</td>
<td>Not regulated</td>
</tr>
<tr>
<td>ADR/RID</td>
<td>Not regulated</td>
</tr>
<tr>
<td>ADN</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL/NDSL</td>
<td>Yes</td>
</tr>
<tr>
<td>PICCS</td>
<td>Yes</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>No</td>
</tr>
<tr>
<td>ENCS</td>
<td>Yes</td>
</tr>
<tr>
<td>IECSC</td>
<td>Yes</td>
</tr>
<tr>
<td>KECL</td>
<td>Yes</td>
</tr>
<tr>
<td>AICS</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*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
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:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>SARA 313 - Threshold Values %</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>111-76-2</td>
<td>1.0</td>
<td>70-90%</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
- Acute Health Hazard: Yes
- Chronic Health Hazard: Yes
- Fire Hazard: Yes
- 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, 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.

U.S. State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

International Regulations

Canada - NDSL
This product does not contain any NDSL chemicals.

Mexico - Grade
Moderate risk, Grade 2

Mexico - Carcinogen Status and Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Carcinogen Status</th>
<th>Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHYLENE GLYCOL MONOBUTYL ETHER</td>
<td></td>
<td>Mexico: TWA 26 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: TWA 120 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 75 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico: STEL 360 mg/m³</td>
</tr>
</tbody>
</table>
Other Regulations
No information available

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and chemical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>Physical hazards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>B</td>
</tr>
</tbody>
</table>

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

Revision Date
19-Nov-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