Safety Data Sheet (SDS)
North American
Revision date: 6/6/2014

SECTION 1: Identification

Product identifiers:
- Product trade name: Softening Additive for Jacquard Professional Screen Inks
- Company product number: JSI2198, JSIQ198
- Other means of identification: Oxydipropyl dibenzoate

Recommended use of the chemical and restrictions on use: Uses:
- Plasticizer

Restrictions on use: None identified

Details of the supplier:
Manufacturer/Supplier:
Rupert, Gibbon & Spider, Inc.
1147 Healdsburg Avenue
Healdsburg CA 95448
707-433-9577

For further information about this SDS: Email: service@jacquardproducts.com

Emergency telephone:
- In USA call CHEMTREC: 1 800 262-8200
- Outside the USA, including ships at sea, call CHEMTREC’s international and maritime telephone number (collect calls accepted): +1 (703) 741-5500
- In Canada call CANUTEC: 1 613 996 6666

General Information:
- +1 800 244 6169 (Worldwide)

SECTION 2: Hazard(s) identification

Information in accordance with 29 CFR 1910.1200 (Hazcom 2012) in effect on May 25, 2012:

Classification of the chemical in accordance with 29 CFR 1910.1200(d):
- Not classified as hazardous under any GHS hazard class.

Label elements in accordance with 29 CFR 1910.1200(f):
- Hazard pictogram(s): Not Applicable
- Signal word: Not Applicable
- Hazard statements: Not Applicable
- Precautionary statements: Not Applicable

Supplemental information: Hazardous to the aquatic environment - Chronic Category 3, Harmful to aquatic life with long lasting effects.

Notes: No Additional Information

Hazard not otherwise classified: No Additional Information

See Section 11 for toxicological information.
SECTION 3: Composition/information on ingredients

Substance:

No Hazardous Components found under applicable regulations.

Amounts specified are typical and do not represent a specification. Remaining components are proprietary, non-hazardous, and/or present at amounts below reportable limits. Exact percentage values for components are proprietary in accordance with
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29 CFR 1910.1200().

SECTION 4: First-aid measures

Description of first aid measures:

General: If irritation or other symptoms occur or persist from any route of exposure, remove the affected individual from the area: see a physician/get medical attention.

Eye contact: Any material that contacts the eye should be washed out immediately with water. Get medical attention if symptoms occur.

Skin contact: Wash the affected area thoroughly with plenty of soap and water. Get medical attention if symptoms occur.

Inhalation: If affected, remove to fresh air. Get medical attention if symptoms occur.

Ingestion: Do not induce vomiting. Rinse out the mouth with water. Get medical attention immediately.

Most important symptoms and effects, both acute and delayed: Irritation. Pre-existing skin problems may be aggravated by prolonged or repeated contact. See section 11 for additional information.

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

SECTION 5: Fire-fighting measures

NFPA flammability class: IIIB

Extinguishing media:

Suitable: NFPA Class IIIB (Combustible liquid): Use water spray, ABC dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposures.

Unsuitable: None known.

Special hazards arising from the chemical:

Unusual fire/explosion hazards: Product is not considered a fire hazard, but will burn if ignited. Closed container may rupture (due to build up in pressure) when exposed to extreme heat.

Hazardous combustion products: Irritating or toxic substances will be emitted upon burning, combustion or decomposition. See section 10 (10.6 Hazardous decomposition products) for additional information.

Special protective equipment and precautions for fire-fighters: Wear self-contained breathing apparatus (SCBA) equipped with a full facepiece and operated in a pressure-demand mode (or other positive pressure mode) and approved protective clothing. Personnel without suitable respiratory protection must leave the area to prevent significant exposure to hazardous gases from combustion, burning or decomposition. In an enclosed or poorly ventilated area, wear SCBA during cleanup immediately after a fire as well as during the attack phase of firefighting operations.

See section 9 for additional information.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures: See Section 8 for recommendations on the use of personal protective equipment. If spilled in an enclosed area, ventilate. Eliminate ignition sources.

Environmental precautions: Do not flush liquid into public sewer, water systems or surface waters.

Methods and materials for containment and cleaning up: Contain by diking with sand, earth or other non-combustible material. Wear proper personal protective clothing and equipment. Absorb spill with an inert material. Place into labeled, closed container; store in safe location to await disposal in accordance with local regulations.

SECTION 7: Handling and storage

Precautions for safe handling: As with any chemical product, use good laboratory/workplace procedures. Do not cut, puncture, or
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Weld on or near the container. Wash thoroughly after handling this product. Always wash up before eating, smoking or using the facilities. Use under well-ventilated conditions. Avoid eye contact. Avoid repeated or prolonged skin contact. Avoid inhalation of aerosol, mist, spray, fume or vapor. Avoid drinking, tasting, swallowing or ingesting this product. Wash contaminated clothing before reuse. Provide eyewash fountains and safety showers in the work area.

Conditions for safe storage, including any compatibilities: Keep away from heat, sparks and open flames. Store cool and dry, under well-ventilated conditions. Store this material away from incompatible substances (see section 10). Do not store in open, unlabeled or mislabeled containers. Plasticizer products will soften plastic materials and as a result they should not be transported in piping systems constructed from these materials.

SECTION 8: Exposure controls / personal protection

Control parameters:

Occupational exposure limits (OEL): No applicable exposure limits.

Exposure controls:

Appropriate engineering controls: Always provide effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist and vapor away from workers to prevent routine inhalation. Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. (Ventilation guidelines/techniques may be found in publications such as Industrial Ventilation: American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Cincinnati, OH, 45240-1634, USA. (http://www.acgih.org/home.htm).

Individual protection measures, such as personal protective equipment (PPE):

Eye/face protection: Wear eye protection.

Skin and body protection: Wear protective gloves. Use good laboratory/workplace procedures including personal protective clothing: labcoat, safety glasses and protective gloves.

Respiratory protection: Respiratory protection is not needed with proper ventilation.

Further information: Eyewash fountains and safety showers are recommended in the work area.

SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear, Colorless to light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight aromatic</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Negligible</td>
</tr>
<tr>
<td>Odor threshold by weight</td>
<td>Not Available</td>
</tr>
<tr>
<td>% Volatile by weight</td>
<td>3.2%</td>
</tr>
<tr>
<td>VOC</td>
<td>3.2%</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>&lt;0.1 mm Hg @ 25 °C</td>
</tr>
<tr>
<td>Vapor density</td>
<td>11.8 (Air=1)</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Boiling point °C</td>
<td>195 °C @ 5 mm Hg</td>
</tr>
<tr>
<td>Boiling point °F</td>
<td>383 °F @ 5 mm Hg</td>
</tr>
<tr>
<td>Flash point</td>
<td>204°C (399°F)</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable (liquid)</td>
</tr>
<tr>
<td>LFL/LEL</td>
<td>Not Available</td>
</tr>
<tr>
<td>UFL/UEL</td>
<td>Not Available</td>
</tr>
<tr>
<td>Surface tension</td>
<td>42.8 dynes/cm @ 25°C (ASTM D1331)</td>
</tr>
</tbody>
</table>

Other information: Amounts specified are typical and do not represent a specification.
SECTION 10: Stability and reactivity

Reactivity: None known.
Chemical stability: This product is stable.
Possibility of hazardous reactions: Hazardous polymerization will not occur.
Conditions to avoid: Excessive heat and ignition sources.
Incompatible materials: Avoid strong acids, bases, and oxidizing agents. Avoid contact with phenols.
Hazardous decomposition products: Carbon dioxide, carbon monoxide and hydrocarbons.

SECTION 11: Toxicological information

Information on likely routes of exposure:
   General: Caution must be exercised through the prudent use of protective equipment and handling procedures to minimize exposure.
   Eyes: May cause eye irritation.
   Skin: May cause skin irritation.
   Inhalation: High airborne concentrations of vapors resulting from heating, misting or spraying may cause irritation of the respiratory tract and mucous membranes.
   Ingestion: May be harmful if swallowed. Ingestion may cause irritation.
   Symptoms/effects, acute and delayed: Irritation

Acute toxicity information: Not classified
Skin corrosion/irritation: Not classified (based on available data, the classification criteria are not met). Serious eye damage/irritation: Not classified (based on available data, the classification criteria are not met).
Respiratory or skin sensitization: Not classified (based on available data, the classification criteria are not met).
Carcinogenicity: Not classified (based on available data, the classification criteria are not met).
   Carcinogenic status: Not listed or regulated by IARC, NTP, OSHA, or ACGIH.
Germ cell mutagenicity: Not classified (based on available data, the classification criteria are not met). DIPROPYLENE GLYCOL DIBENZOATE: In vitro testing showed no mutagenic activity.
Reproductive toxicity: Not classified (based on available data, the classification criteria are not met). DIPROPYLENE GLYCOL DIBENZOATE: Reproductive toxicity, 2-generation oral study in rats: NOAEL (no-observed adverse-effect-level) 500 mg/kg bw/day. Developmental toxicity, oral, rats: NOAEL of 500 mg/kg bw/day.
Specific target organ toxicity (STOT) - single exposure: Not classified (based on available data, the classification criteria are not met).
   Specific target organ toxicity (STOT) - repeated exposure: Not classified (based on available data, the classification criteria are not met). DIPROPYLENE GLYCOL DIBENZOATE: A 13-week dietary study in rats observed decreased body weights, and liver, spleen and caecum effects at a dose of 2500 mg/kg/day which showed completed recovery within 4 weeks after exposure. NOAEL (No-Observed-Adverse-Effect-Level), oral, rat - 1000 mg/kg bw/day.
Aspiration hazard: Not classified (based on available data, the classification criteria are not met).
Other toxicity information: No additional information available.
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SECTION 12: Ecological information

Ecotoxicity: DIPROPYLENE GLYCOL DIBENZOATE: Freshwater Fish Toxicity - 96 hour LC50=3.7 mg/L. Freshwater Invertebrates Toxicity - 48 hour EL50=19.3 mg/L. Algal Toxicity - 96 hour EL50=3.6 mg/L, NOELR=0.46 mg/L.

Persistence and degradability: Expected to readily biodegrade, based on similar material(s).

Bioaccumulative potential: Not expected to bioaccumulate.

Mobility in soil: KOC=3981 (20°C).

Other adverse effects: No additional information available.

SECTION 13: Disposal considerations

For waste disposal purposes, this product is not known to be defined or designated as hazardous by current provisions of the Federal (EPA) Resource Conservation and Recovery Act (RCRA, 40CFR261). Incinerate waste product when in liquid form (i.e., as supplied) in a properly permitted (approved) incineration facility in accordance with federal, state and local regulations. Liquids cannot be disposed of in a landfill.

See Section 8 for recommendations on the use of personal protective equipment.

SECTION 14: Transport information

The information below is provided to assist in documentation. It may supplement the information on the package. The package in your possession may carry a different version of the label depending on the date of manufacture. Depending on inner packaging quantities and packaging instructions, it may be subject to specific regulatory exceptions.

UN number: N/A

UN proper shipping name:
Not regulated - See Bill of Lading for Details

Transport hazard class(es):
- U.S. DOT hazard class: N/A
- Canada TDG hazard class: N/A
- Europe ADR/RID hazard class: N/A
- IMDG Code (ocean) hazard class: N/A
- ICAO/IATA (air) hazard class: N/A

A "N/A" listing for the hazard class indicates the product is not regulated for transport by that regulation.

Packing group: N/A

Environmental hazards:
- Marine pollutant: Not Applicable
- Hazardous substance (USA): Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code: Not Applicable

Special precautions for user: Not Applicable
SECTION 15: Regulatory information

Safety, health and environment regulations/legislation specific for the product:

U.S. federal and state regulations/legislation:

This SDS has been prepared in accordance with the hazard criteria of the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Reportable Quantity (RQ):

Not Applicable

U.S. Superfund Amendments and Reauthorization Act (SARA) - SARA Section 313:

None Known

California Proposition 65: This product does not contain any components currently on the California List of Known Carcinogens and reproductive Toxins

Canada regulations/legislation:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Canadian Workplace Hazardous Material Information System (WHMIS) classification: Not controlled

Canadian Ingredient Disclosure List:

None known to be present or none in reportable amounts

Mexico regulations/legislation:

This SDS contains the information required by NOM-018-STPS-2000 Workplace Hazardous Chemical Substances Communication and Identification Standard.

Chemical inventories:

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Domestic Substances List (DSL):</td>
<td>Y</td>
</tr>
<tr>
<td>Canadian Non-Domestic Substances List (NDSL):</td>
<td>N</td>
</tr>
<tr>
<td>U.S. Toxic Substances Control Act (TSCA):</td>
<td>Y</td>
</tr>
</tbody>
</table>

A "Y" listing indicates all intentionally added components are either listed or are otherwise compliant with the regulation. A "N" listing indicates that for one or more components: 1) there is no listing on the public inventory; 2) no information is available; or 3) the component has not been reviewed.

SECTION 16: Other information

SDS Revision date: 6/6/201

The information contained in this SDS is based on data from sources considered to be reliable but Rupert, Gibbon & Spider, Inc. does not guarantee the accuracy or completeness thereof. Rupert, Gibbon & Spider, Inc. urges each customer or recipient of this SDS to study it carefully to become aware of and understand the hazards associated with this product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology or fire and understand the data in this SDS.