SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/ MIXTURE AND OF THE COMPANY/ UNDERTAKING

Product Name: Compress UV(455-S) Hybrid Ink - Clear
Product IDN: CI-HYB-CLR500
Material Uses: Ink for use in an ink jet process.
Manufacturer: ColDesi / Colman & Company, Inc., 3634 131st Ave N., Clearwater, FL 33762
Phone: 800-891-1094

IN EMERGENCY, call CHEMTREC, in US or Canada, call 800-424-9300
Outside of US or Canada, call 703-527-3887

Date Issued: March 26, 2020

2. HAZARD IDENTIFICATION

2.1 Classifications
Classification according to GHS
GHS09 Environment:
  Aquatic Chronic 2 H411: Toxic to aquatic life with long lasting effects.

GHS07
  Acute Tox 4 H302: Harmful if swallowed
  Skin Irrit. 2 H315: Cause skin irritation
  Skin Sens 1: H317: May cause an allergic skin reaction
  EyeDam.1 H318: Causes serious eye damage
  Eye Irrit. 2A H319: Causes Serious eye irritation
  STOT SE 3 H335: May cause respiratory irritation
GHS08 Health Hazard
  Repr 2. H361: Suspected of damaging fertility or the unborn child

2.2 Label Elements:
Labeling according to GHS

Hazard pictograms

Signal Word: Danger
Hazard Statements:
H302: Harmful if swallowed
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage
H319: Causes serious eye irritation.
H335: May cause respiratory irritation.
H361: Suspected of damaging fertility or the unborn child.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statements:
PREVENTION:
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P264: Wash hands thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.
P271: Use only outdoors or in a well-ventilated area.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves.
P281: Use personal protective equipment as required.

RESPONSE:
P301+P312+P330: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P333+P313: IF SKIN irritation or rash occurs: Get medical advice/attention.
P337+P313: IF eye irritation persists: Get medical advice/attention.
P363: Wash contaminated clothing before reuse.
P391: Collect spillage.

STORAGE:
P403 +P233 Store in a well-ventilated place. Keep container tightly closed.

DISPOSAL:
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
2.3 Other Hazards

Results of PBT and vPvB assessment:
- PBT: Not applicable.
- vPvB: Not applicable.

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Characterization: Mixture
Inkjet printing ink in organic solvents.

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS No</th>
<th>EC Number</th>
<th>Reach Registration Number</th>
<th>Percent (%)</th>
<th>Classification GHS (Rev 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,6-Hexanediol Diacrylate</td>
<td>13048-33-4</td>
<td>235-921-9</td>
<td>Registered</td>
<td>10-20%</td>
<td>SkinIrrit.2: H315 EyelIrrit.2: H319 SkinSens.1: H317</td>
</tr>
<tr>
<td>Proprietary Monomer</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Registered</td>
<td>10-20%</td>
<td>EyeDam.1: H318 SkinIrrit.2: H315 STOT SE 3: H335 Acute Tox.4: H302</td>
</tr>
<tr>
<td>2,4,6-trimethylbenzoyl–diphenyl phosphine oxide</td>
<td>75980-60-8</td>
<td>278-355-8</td>
<td>Registered</td>
<td>1-10%</td>
<td>Skin Sens 1: H317 Repr. 2: H361 Aquatic Chronic 2: H411</td>
</tr>
<tr>
<td>Benzyl Acrylate</td>
<td>2495-35-4</td>
<td>219-673-9</td>
<td>Registered</td>
<td>10-20%</td>
<td>SkinIrrit.2: H315 EyelIrrit.2: H319</td>
</tr>
<tr>
<td>Urethane Acrylate</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Pending</td>
<td>1-5%</td>
<td>SkinSens.1: H317 Acute Tox. 3: H331 [powder] Aquatic Chronic 2: H411</td>
</tr>
<tr>
<td>Acrylated Oligoamine</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Registered</td>
<td>1-5%</td>
<td>SkinIrrit.2: H315 EyelIrrit.2: H319</td>
</tr>
<tr>
<td>Polyester Acrylate</td>
<td>Proprietary</td>
<td>Proprietary</td>
<td>Pending</td>
<td>1-5%</td>
<td>SkinIrrit.2: H315 EyelIrrit.2: H319</td>
</tr>
<tr>
<td>Isobornyl Acrylate</td>
<td>5888-33-5</td>
<td>277-561-6</td>
<td>Pre-Registered</td>
<td>20-30%</td>
<td>SkinIrrit.2: H315 EyelIrrit.2: H319 STOT SE 3: H335 Aquatic Chronic 2: H411</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES
4.1 Description

**Inhalation**: If inhaled move to fresh air. Respiratory irritation may occur, if symptoms develop seek medical attention. If not breathing, give artificial respiration preferably mouth to mouth.

**Ingestion**: Give two glasses of water and monitor closely. Call a poison control center, emergency room, or physician before trying to induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

**Skin Contact**: In case of contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention if symptoms appear.

**Eye Contact**: Do not rub eyes. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, get medical attention.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

**Potential Health Effects**

**Eye Contact**: Causes severe eye injury which may persist for several days.

**Inhalation**: Exposure to vapors (mist) may be harmful to the unborn child and at the risk of impaired fertility and irritate nose, throat/respiratory system.

**Skin Contact**: Contact with skin may cause irritation, swelling or redness, allergy and/or sensitization.

**Ingestion**: May cause injury of mouth, throat, and stomach.

**Over Exposure Signs/Symptoms**

**Eye Contact**: No specific data.

**Inhalation**: No specific data.

**Skin Contact**: No specific data.

**Ingestion**: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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**5. FIRE-FIGHTING MEASURES**

5.1 Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water spray.

5.2 Special Hazards arising from the substance or mixture

Carbon Oxides

5.3 Advice for Fire-Fighters

Use breathing apparatus with independent air supply. Protective suit.

5.4 Further Information

Use water spray to cool unopened containers.
5.5 NFPA Ratings
   Health: 2 Flammability: 2 Reactivity: 1
   Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures
   Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

6.2 Environmental Precautions
   Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
   Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

6.4 Reference to other sections
   For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Handling
   : Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge.

7.2 Conditions for safe storage
   : Store in cool place and away from light. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses
   : no data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
   Components with workplace control parameter

8.2 Exposure controls
   Appropriate engineering controls
   Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal Protective Equipment
**Respiratory Protection**: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such NIOSH (US) or CEN (EU).

**Body Protection**: Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Skin Protection**: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Eye/face Protection**: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU)

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight odor</td>
</tr>
<tr>
<td>Boiling Point/boiling range of ink</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting Point/melting range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point of ink</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Easily soluble</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>VOCs</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No data available</td>
</tr>
</tbody>
</table>

The physical and chemical data given in Section 9 are typical values for this product and are not intended to be product specifications.

### 10. STABILITY AND REACTIVITY

10.1 Reactivity : High temperatures and UV light cause rapid polymerization
10.2 Chemical Stability : Unstable. Polymerizes under heat and light
10.3 Possibility of hazardous reactions : No data available
10.4 Conditions to avoid : Heat, flames, sparks, direct exposure to light
10.5 Incompatible materials : Strong oxidizing agents, strong bases, water
10.6 Hazardous decomposition products: Other decomposition products – no data available

11. TOXICOLOGICAL INFORMATION

11.1 Routes of Overexposure: Eye, skin, inhalation, and oral ingestion

11.2 Health Hazards:

Acute Health Hazards: Overexposure of the eye surface to ink may be mildly irritating. Overexposure of ink contact with the skin may cause irritation and, in some people, swelling and redness. Intentional inhalation to ink vapors may result in respiratory tract irritation. Intentional or accidental oral ingestion may cause an upset stomach.

Chronic Health Hazards: No information available

Mutagenicity: No information available

Carcinogenicity: No information available

11.3 Toxicity:

Acute Toxicity Data: No information
Inhalation: No information
Irritating: No information
Sensitization: Not available
Reproductive Toxicity: Not available.

12. ECOLOGICAL INFORMATION

12.1 Toxicity: Aquatic toxicity: No further information available

12.2 Persistence and Degradability: No further relevant information available

12.3 Bioaccumulation Potential: No further relevant information available

12.4 Mobility in Soil: No further relevant information available

12.5 Results of PBT and vPvB Assessment:

PBT: Not applicable
vPvB: Not applicable

12.6 Other Adverse Effects: No further relevant information available

13. DISPOSAL CONSIDERATIONS

13.1 Waste Disposal:

Product

Waste must be disposed of according to the applicable state, federal, and local regulations.

Contaminated Packaging

Dispose of as unused product
14. TRANSPORTATION INFORMATION

United States DOT Domestic Surface, USA, ICAO/IATA AIR, IMO/IMDG OCEAN, ADR, or RID

14.1 UN Number : UN3082
14.2 UN Proper Shipping Name : Environmentally Hazardous Substance, Liquid, N.O.S. [Acrylic Monomers].
14.3 Transport Hazard Class(es) : ADR, IMDG, IATA – Class 9
14.4 Packaging Group : III
14.5 Environmental Hazards : Yes
14.6 Special Precautions for User : Transport and storage of the product in accordance with general precautions and instructions mentioned in this SDS
14.7 Other Information : Inner packaging less than 5L or 5Kg is exempted from Dangerous Goods. Special Provision A197

15. REGULATORY INFORMATION

U.S Federal Regulations : Not available.
OSHA : This product is classified as an OSHA hazardous material.
CERCLA: SARA Hazard Category : Acute Hazard
Section 313 : *Indicates toxic chemical(s) subject to the reporting requirements of the Section 313 of Title III and of 40 CFR 372.
International Regulations : Not available.
Canadian WHMIS : Not available.
Canadian Environmental Protection Act : Not available.
EINECS : Not available.
State Regulations : Not available.
State of California Proposition 65 : This product does not contain any chemicals known to the state of California to cause cancer, birth, or any other reproductive defects

16. OTHER INFORMATION

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

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