Safety Data Sheets

1. Identification

Product Name: ColDesi UV DTF CLEANER and FLUSH
Code No.: UV-Cleaner-500
General Use: UV Ink Cleaner/Flush for DTF Printing System
Product Description: UV Inkjet Cleaning Solution

Supplier Company: COLDESI / COLMAN & COMPANY, INC.
Address: 12198 44th Street North, Clearwater, FL 33762 - USA
Telephone No.: (800) 891-1094
IN EMERGENCY: Call CHEMTREC, in US and Canada, 800-424-9300
Outside of US or Canada, call 703-527-3887

2. Hazards Identification

Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irritation 2     H315
Eye Irritation 2     H319
Skin Sensitivity 1    H317
Aquatic Chronic 2    H411

Full text of H-phrases: see Section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Xi; R36/38
R43
N; R51/53

Full text of R-phrases: see Section 16

Adverse physiochemical, human health and environmental effects
No additional information available
Safety Data Sheets

Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):
- Warning
- Hexamethylene diacrylate
- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- Toxic to aquatic life with long lasting effects

Precautionary statements (CLP)
- Avoid breathing vapours, gas, mist, dust

Precautionary Statements
[Prevention]
- Obtain SDS (Safety Data Sheet) and printer's operation manual before use.
- Do not breathe dust/fume/gas/mist/vapour/spray
- Wear protective gloves, protective clothing, eye protection
- If skin irritation or rash occurs: Get medical advice/attention
- If eye irritation persists: Get medical advice/attention
- IF on SKIN (or Hair)
- IF SWALLOWED
- Immediately call a POISON CENTER or doctor/physician
- Rinse skin with water/shower.
- IF exposed or concerned: Get medical advice/attention.

[Disposal]
- Dispose of contents/container in accordance with local/regional/national/international regulation (to be specified).

Other hazards
No additional information available

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>No</th>
<th>Chemical Name</th>
<th>Wt%</th>
<th>CAS No.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Diethylene glycol butyl ether acetate</td>
<td>60·90</td>
<td>124·17·4</td>
</tr>
<tr>
<td>2</td>
<td>Diethylene glycol methyl diethyl ether</td>
<td>5·20</td>
<td>1002·67·1</td>
</tr>
</tbody>
</table>
Safety Data Sheets

| 3 | Tri (N-nitroso-N-phenyl hydroxylamine) aluminum salt | 0.1 - 3 | 15305-07-4 |

4. First Aid Measures

- **Inhalation**: Remove person to fresh air. If you feel unwell, get medical attention.
- **Eye Contact**: Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.
- **Skin Contact**: Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.
- **Ingestion**: Rinse mouth. If you feel unwell, get medical attention.

**Most Important Symptoms/Effects**: See Section 11.1. Information on toxicological effects.

**Indication of Immediate Medical Attention and Special Treatment Needed, If Needed**: Not applicable.

5. Fire Fighting Measures

- **Flammable Properties**: Flash point > 200 °F
- **Extinguishing Media**: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.
- **Special Hazards Arising from the Chemical**: Closed containers exposed to heat from fire may build pressure and explode.
Safety Data Sheets

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide (During Combustion)

Special protective actions for fire-fighters: Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

Environmental precautions: Avoid release to the environment. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

Methods and material for containment and cleaning up: Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container.

Dispose of collected material as soon as possible.

7. Handling and Storage
Safety Data Sheets

Precautions for Safe Handling

Avoid skin contact with hot material. For industrial or professional use only. Do not use in a confined area with minimal air exchange. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Use personal protective equipment (gloves, respirators, etc.) as required. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Conditions for Safe Storage, including any Incompatibilities

Keep cool. Protect from sunlight. Store away from heat. Store away from oxidizing agents.

8. Exposure Controls / Personal Protection

Control parameters

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</table>
8.2 Exposure controls

Appropriate engineering measures: Local exhaust is needed at source of vapours. Keep away from children.

Personal Protective measures: Gloves, Safety glasses, Protective clothing, Wear respiratory mask.

Hand: Nitrile rubber gloves (0.4 mm). Breakthrough time (EN 374-3:2003): > 48 (www.echa.europa.eu)

Eye protection: Chemical goggles or safety glasses (acc. EN 166).

Skin and body protection: Wear suitable protective clothing.

Respiratory protection: Wear approved mask. Do not inhale vapour.

Other protection: Do not eat, drink or smoke when using product.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Acrylate Odor</td>
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<tr>
<td>pH level</td>
<td>Not available</td>
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<tr>
<td>Boiling Point/Boiling Range</td>
<td>&gt;200 °F</td>
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<tr>
<td>Melting Point/Melting Range</td>
<td>Not available</td>
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<tr>
<td>Decomposition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;200 °F</td>
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<tr>
<td>Auto ignition temperature</td>
<td>Not available</td>
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<tr>
<td>Flammability (Solid, Gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper/Lower Flammability or Explosive Limits</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&lt; 10 mmHg [@ 20 °C]</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.04 [Ref Std: WATER=1]</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Safety Data Sheets

Water Solubility : Negligible
Partition Coefficient (n-octanol / Water) : Not available
Viscosity : 4.5-6.5cps(25°C)
Vapor Density : > 1 [Ref Std: AIR=1]
Evaporation Rate : Not available
VOC : Not available

10. Stability and Reactivity

Reactivity : This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.
Chemical Stability : Stable under normal conditions of use.
Possibility of Hazardous Reactions : Hazardous polymerization may occur. (Upon depletion of inhibitor or exposure to heat)
Conditions to Avoid : Heat
Incompatible Materials : Strong oxidizing agents
Hazardous Decomposition : None known.

Refer to section 5.2 for hazardous decomposition products during combustion

11. Toxicological Information

Inhalation : Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact : Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.
Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.
Allergic Skin Reaction (non-photo induced) in sensitive people: Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact : Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision

Ingestion : May be harmful if swallowed. Gastrointestinal Irritation:
Safety Data Sheets

Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Additional Health Effects:
Reproductive/Developmental: Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

12. Ecological Information

Handling is noted because it might influence the environment when leaking and abandoning it.
Especially, note that the product doesn't flow directly to ground, the river, and the drain ditch.

Ecotoxicity: Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

Persistence and Degradability: Not available

Bioaccumulation: Not available

Mobility: Not available

Other Toxicity: Not available

13. Disposal Considerations

Regional legislation (waste): Disposal must be done according to official regulations.
Waste disposal recommendations: Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.

Ecology - waste materials: Avoid release to the environment.
European List of Waste (LoW) code: 08 03 12* - waste ink containing dangerous substances
Safety Data Sheets

14. Transport Information

Check a thing without a leak in a container.
Perform prevention of collapse of cargo surely.

UN Number : /
Shipping Name : Environmentally hazardous substance, liquid, n.o.s.
(Hypothesis: TETRAHYDROFURFURYL ACRYLATE)

Hazardous Class or Division : /
Packing Group (PG) : /
Marine Pollutant : Yes
Remarks : Single or inner packaging less than 5 L (liquid) or 5 kg net (solids) is excepted from Dangerous Goods regulations.
Refer to ICAO/IATA A197, IMDG 2.10.2.7, ADR SP 375.

15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations
No REACH Annex XVII restrictions
Contains no substance on the REACH candidate list
VOC content : 0 g/l

National regulations
No additional information available

Chemical safety assessment
No chemical safety assessment has been carried out

Product Name: UV DTF CLEANER and FLUSH
## 16. Other Information

Indication of changes:
according to

<table>
<thead>
<tr>
<th>2.1</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Added</th>
</tr>
</thead>
</table>


Full text of R-, H- and EUH-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 2</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 2</td>
</tr>
<tr>
<td>Eye Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Sensitisation — Skin, category 1</td>
</tr>
<tr>
<td>Skin Sens. 1A</td>
<td>Sensitisation — Skin, category 1A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STOT SE 3</th>
<th>Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
<tr>
<td>H335</td>
<td>May cause respiratory irritation</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects</td>
</tr>
<tr>
<td>R22</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>R36</td>
<td>Irritating to eyes</td>
</tr>
<tr>
<td>R36/38</td>
<td>Irritating to eyes and skin</td>
</tr>
<tr>
<td>R37/38</td>
<td>Irritating to respiratory system and skin</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin</td>
</tr>
<tr>
<td>R41</td>
<td>Risk of serious damage to eyes</td>
</tr>
<tr>
<td>R43</td>
<td>May cause sensitisation by skin contact</td>
</tr>
<tr>
<td>R51/53</td>
<td>Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment</td>
</tr>
<tr>
<td>N</td>
<td>Dangerous for the environment</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</td>
</tr>
<tr>
<td>PC18</td>
<td>Ink and Toners</td>
</tr>
<tr>
<td>PROC1</td>
<td>Use in closed process, no likelihood of exposure</td>
</tr>
<tr>
<td>SU22</td>
<td>Professional uses: Public domain (administration, education, entertainment,</td>
</tr>
</tbody>
</table>
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