Material Safety Data Sheet
For Coatings, Resins and Related Materials

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals

24 Hour Emergency: 1-800-123-4567 CHEMTREC: 1-800-424-9300
National Response in Canada CANUTEC: 613-996-6666
Outside U.S. and Canada Chemtrec: 202-483-7616

Section 1 - Chemical Product / Company Information

Product Name: 0 G/L VOC Acrylic Polyurethane  Revision Date: 4-3-2012
Identification Number: 36 Series  Completed by: R. SYPOWICZ

Product Use/Class: ACRYLIC POLYURETHANE GLOSS - 0 G/L INTERMIX (with tBA)

Manufacturer: Deft, Inc.
17451 Von Karman Ave
Irvine, CA 92614
Emergency Phone: (800) 424-9300
Information Phone: (949) 474-0400

Section 2 - Hazards Identification

*** Emergency Overview ***: Flammable liquid and vapors. Misc, colored liquid with a solvent odor. Flammable liquid and vapors. Effects the central nervous system. Contact with eyes or skin causes irritation. Harmful by inhalation, in contact with skin, and if swallowed.

Effects Of Overexposure - Eye Contact: Exposure to liquid, aerosol, or vapors may cause irritation, tearing, redness, and swelling accompanied by a stinging sensation. Direct eye contact may cause irritation. A pre-existing eye disease may become worse upon exposure to material or its emissions.

Effects Of Overexposure - Skin Contact: Prolonged and repeated skin contact may cause dermatitis, drying, and defatting due to the solvent properties. Direct skin contact may cause irritation. Symptoms may include swelling, redness, and rash. May cause allergic dermatitis.

Effects Of Overexposure - Inhalation: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes) & acute nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness, or coma. Inhalation may cause headaches, difficult breathing, and loss of consciousness. Exposure may cause drowsiness. Inhalation may cause burning sensation, shortness of breath, and coughing.

Effects Of Overexposure - Ingestion: May result in possible corrosive action in the mouth, stomach tissue and digestive tract. Vomiting may cause aspiration of the solvent, resulting in chemical pneumonitis. Harmful or fatal if swallowed. Ingestion causes damage to the central nervous system. It may include, acute nervous system depression, which is characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, drowsiness, unconsciousness, or coma. Ingestion may cause gastrointestinal irritation, abdominal pain, nausea, vomiting, and diarrhea.

Effects Of Overexposure - Chronic Hazards: Symptoms of overexposure may occur for up to 48 hours after the original exposure occurred. Prolonged contact will cause drying and cracking of the skin, due to defatting action. Skin sensitization, asthma or other allergic responses may develop. Listed as a Carcinogen: NTP? : No, IARC Monographs? : Yes, OSHA regulated? : No.

Primary Route(s) Of Entry: Skin Contact, Skin Absorption, Inhalation, Ingestion, Eye Contact
Section 3 - Composition / Information On Ingredients

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>Weight % Reporting Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL</td>
<td>98-56-6</td>
<td>25-45</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>13463-97-7</td>
<td>0-20</td>
</tr>
<tr>
<td>t-BUTYL ACETATE</td>
<td>540-88-5</td>
<td>5-20</td>
</tr>
<tr>
<td>MISC. NON-HAZARDOUS PIGMENTS</td>
<td>NA</td>
<td>0-20</td>
</tr>
<tr>
<td>CARBON BLACK</td>
<td>1333-86-4</td>
<td>0.0-2.0</td>
</tr>
<tr>
<td>ACRYLIC NON-HAZARDOAL</td>
<td>NA</td>
<td>20-40</td>
</tr>
</tbody>
</table>

THE ABOVE LISTED PRODUCTS ARE ON THE TSCA INVENTORY LIST UNLESS OTHERWISE NOTED IN SECTION 8.

Section 4 - First Aid Measures

First Aid - Eye Contact: If material gets into eyes, flush with water immediately for 20 minutes. Hold eyelids open to rinse out the entire eye. Consult a physician. If eyes are irritated from airborne exposure, move to fresh air.

First Aid - Skin Contact: In case of contact, immediately flush skin with plenty of water and wash affected areas thoroughly with soap and water. Remove contaminated clothing and shoes. If rash or irritation develops, consult a physician.

First Aid - Inhalation: Move to fresh air in case of accidental inhalation of vapors. Give oxygen or artificial respiration if needed. In the case of inhalation of aerosol/mist call 911 immediately. Asthmatic type symptoms may develop and maybe immediate or delayed by several hours.

First Aid - Ingestion: Do not induce vomiting. Do not give anything to an unconscious person. Obtain medical help.

Section 5 - Fire Fighting Measures

FLASH POINT (°F): 40 TCC
LOWER EXPLOSIVE LIMIT (%): 0.9
UPPER EXPLOSIVE LIMIT (%): 11

Extinguishing Media: Alcohol Foam, Carbon Dioxide, Dry Chemical, Foam, Water Fog, Water Spray, Dry Sand, Dry Powder

Unusual Fire And Explosion Hazards: Fire or intense heat may cause violent rupture of packages. Remove all sources of ignition. Toxic gases may form when product burns. Isolate from heat, sparks, electrical equipment and open flame. Fire may ensue when product comes in contact with strong oxidizers. Do not use a cutting or welding torch near or on a drum of product, because vapors can ignite explosively, even if the drum is empty and contains only product residue. Application to hot surfaces requires special precautions. Keep containers tightly closed.

Special Firefighting Procedures: Firefighters should wear full protective clothing. In the event of fire, wear self-contained breathing apparatus. Flammable. Cool fire-exposed containers using water spray.

Section 6 – Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Evacuate all non-essential personnel. Remove all sources of ignition. Ventilate area. Contain and remove spilled material with inert absorbent and non-sparking tools. Use personal protective equipment as necessary. Dike to prevent entering any sewer or waterway.
Section 7 - Handling and Storage

Handling: Always use grounding leads when transferring from one container to another. Use only in ventilated areas. Do not handle until the manufacturers safety precautions have been read and understood. All metal parts of the mixing and processing equipment must be grounded. Protect container against physical damage. Handle in accordance with good industrial hygiene and safety practice. Keep away from heat and sources of ignition.

Storage: Protect material from direct sunlight. Avoid storing near high temperatures, fire, open flames, and spark sources. Keep containers upright to prevent leakage and tightly closed in a dry, cool and well-ventilated place. Store in buildings designed to comply with OSHA 1910.106.

Section 8 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
<td>N.E.</td>
</tr>
<tr>
<td>T-BUTYL ACETATE</td>
<td>200 ppm</td>
<td>N.E.</td>
<td>200 ppm</td>
<td>N.E.</td>
</tr>
<tr>
<td>TITANIUM DIOXIDE</td>
<td>10 mg/m3</td>
<td>N.E.</td>
<td>15 mg/m3</td>
<td>N.E.</td>
</tr>
<tr>
<td>CARBON BLACK</td>
<td>3.5 mg/m3</td>
<td>N.E.</td>
<td>3.5 mg/m3</td>
<td>N.E.</td>
</tr>
<tr>
<td>MISC PIGMENTS</td>
<td>10 mg/m3</td>
<td>N.E.</td>
<td>15 mg/m3</td>
<td>N.E.</td>
</tr>
</tbody>
</table>

Notes:

BENZENE, 1-CHLORO-4 TRIFLUOROMETHYL CAS# 98-56-6 prolonged or repeated exposure to large amount through breathing or swallowing has been shown cause damage to the liver and kidneys in animal studies.

TITANIUM DIOXIDE – CAS# 13463-97-7 ACGIH/TLV & OSHA/PEL exposure limits are for the total dust. Titanium Dioxide is considered by NIOSH to be a potential occupational carcinogen under Hazard Communication Standard, 29 CFR 1910.1200. This was based on NIOSH’s interpretation of the study by Lee, Trochimowicz, and Reinhardt [1985], "Pulmonary Response of Rats Exposed to Titanium Dioxide (TiO2) by Inhalation for Two Years." "The authors of this study concluded that based on the excessive dust loading and overwhelmed clearance mechanism in the lungs of rats exposed chronically at 250 mg/m3 (6 hrs/day, 5 days/week for 2 years), the biological relevance of lung tumors to man appears to be negligible."

T-BUTYL ACETATE – CAS# 540-88-5 exposure caused thyroid follicular cell hyperplasia, liver and kidney toxicity, embryo/fetotoxicity and developmental delay, benign kidney and thyroid tumors, kidney pathology, inflammation of urinary bladder resulting in hyperplasia to occur in animal studies.

CARBON BLACK – CAS# 1333-86-4 IARC GROUP 2B: possibly carcinogenic to humans.

Engineering Controls: Local ventilation of emission sources may be necessary to maintain ambient concentrations below permissible OSHA exposure limits. Remove all ignition sources (heat, sparks, flame, and hot surfaces).

Respiratory Protection: A respirator recommended or approved for use in an organic vapor environment (air purifying or fresh air supplied) may be necessary. Observe OSHA regulations for respirator use. Ventilation should be provided to keep exposure levels below permissible OSHA limits. If TLV limits can be maintained and documented below OSHA/ACGIH limits, an air supplied respirator may not be required. Other OSHA/NIOSH approved respirators may be used. IT IS THE END USER'S RESPONSIBILITY TO DETERMINE PROPER PROTECTION.

Skin Protection: Chemical-resistant gloves (neoprene, natural rubber) should be used to prevent skin contact.
Zero VOC Acrylic Polyurethane Topcoats

General MSDS - Gloss Intermix Colors (with tBA)

**Eye Protection:** Wear safety eyewear (safety glasses, safety glasses with side-shields, chemical goggles, or face shields) to prevent eye contact. Other protective equipment: Long sleeve and long leg clothing is recommended. Remove and wash contaminated clothing before reuse or discard. Safety shower and eyewash station should be located in immediate work area.

**Hygienic Practices:** Wash hands before breaks, eating, smoking, and at the end of the workday.

### Section 9 - Physical and Chemical Properties

- **Boiling Range (°F):** 208-392
- **Vapor Density:** Heavier than air
- **Odor:** Solvent odor
- **Odor Threshold:** N.D.
- **Appearance:** Paint, liquid
- **Evaporation Rate:** Faster than n-Butyl Acetate
- **Solubility in H2O:** None
- **Freeze Point:** N.D.
- **Vapor Pressure:** N.D.
- **PH:** N.A.
- **Physical State:** Liquid
- **Specific Gravity:** 1.1 TO 1.7
- **Viscosity:** Thin liquid to heavy viscous material

(See section 16 for abbreviation legend)

### Section 10 - Stability and Reactivity

**Conditions To Avoid:** Do not breathe vapors or spray mist. Avoid oxidizing conditions. Avoid high temperatures, sparks, or open flames.

**Incompatibility:** Not compatible with plastics or nitrates. Material is incompatible with amines. Material is incompatible with strong oxidizers, reducing agents, strong acids, chromic anhydride, chromyl alcohol, hexachloromelamine, and hydrogen peroxide. Also, incompatible with permonosulfuric acid, chloroform, alkalis, chlorine compounds, potassium t-butoxide, and thioglycol.

**Hazardous Decomposition:** Thermal decomposition can lead to the generation and release of gases and vapors including carbon monoxide, carbon dioxide, oxides of nitrogen, and hydrocarbons. May produce gases containing fluorine or chlorine.

**Hazardous Polymerization:** Will not occur.

**Stability:** Stable under recommended storage conditions.

### Section 11 - Toxicological Information

- **Product LD50:** N.E.
- **Product LC50:** N.E.

### Section 12 -- Ecological Information

Ecological Information: No Information.

### Section 13 - Disposal Information

Disposal Information: EPA Hazardous Waste Number/Code: D001

**Hazardous Waste Characteristics:** Ignitability. Dispose of waste in accordance with federal, state, and local environmental regulations. Empty containers will contain product residue and flammable vapors. Handle as hazardous material. Do not incinerate closed containers.
Section 14 - Transportation Information

DOT Proper Shipping Name: Paint
DOT Technical Name: N.A.
DOT Hazard Class: Flammable liquid 3
DOT UN/NA Number: UN-1263

Packing Group: II
Hazard Subclass: N.A.
IATA Hazardous: Yes

Section 15 - Regulatory Information

CERCLA – SARA Hazard Category
This product has been reviewed according to the EPA ‘Hazard Categories’ promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: IMMEDIATE HEALTH HAZARD, CHRONIC HEALTH HAZARD, FIRE HAZARD, PRESSURIZED GAS HAZARD

SARA Section 313:
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

NONE

Toxic Substances Control Act:
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

NONE

U.S. State Regulations: As follows –

New Jersey Right-to-Know:
The following materials are non-hazardous, but are among the top five components in this product.

Component: ACRYLIC RESIN
CAS Number: PROPRIETARY

Component: ACRYLIC POLYMER
CAS Number: PROPRIETARY

Component: U.V. ABSORBER
CAS Number: 41556-26-7

Pennsylvania Right-to-Know:
The following non-hazardous ingredients are present in the product at greater than 3%.

Component: ACRYLIC RESIN
CAS Number: PROPRIETARY

Component: ACRYLIC POLYMER
CAS Number: PROPRIETARY

Component: U.V. ABSORBER
CAS Number: 41556-26-7

International Regulations: As follows –

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

CANADIAN WHMIS CLASS: N.D.
Section 16 - Other Information

HMIS Ratings:
Health: 2*  Flammability: 3  Reactivity: 1  Personal Protection: G

This is a general MSDS for intermix products supplied by Deft Inc. These products are formulated lead and chromium-free. The General Safety Information and Hazard Ratings contained in this document are representative of products formulated using Deft Inc.’s Zero VOC 36 Series topcoats. If a color specific data sheet is necessary, please contact your Deft distributor or Deft Inc technical service group at (800) 544-3338.

NFPA Fire Ratings:  3
NFPA Health Ratings:  2
NFPA Specific Hazard Ratings: NA
NFPA Stability Ratings:  1

This product is formulated with no regulated Volatile Organic Compounds

<table>
<thead>
<tr>
<th>Maximum VOC Contents:</th>
<th>G/L</th>
<th>LB/GAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base (as supplied) Coating VOC (excluding exempt)</td>
<td>0 G/L</td>
<td>0.0</td>
</tr>
<tr>
<td>Base (as supplied) Material VOC (including exempt)</td>
<td>0 G/L</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Standard Mix for Application: 3 to 1 with 80X040

As Applied Coating VOC (excluding exempt) | 0 G/L | 0.0 |
AS Applied Material VOC (including exempt) | 0 G/L | 0.0 |

HAP’s Content is less than 0.5 %. It qualifies as HAP’s free coating for recordkeeping purposes.

This MSDS reflects general hazards for Deft Inc. 36 Series ZERO VOC Topcoats. Color specific MSDS can be obtained upon request to the supplier of these coatings.

REASON FOR REVISION: New MSDS
REGULATORY CODE: 36 ET Series – East Coast High Gloss
LAYOUT CODE: General Intermix

Legend:  N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined
The information contained on this MSDS has been checked and should be accurate. However, it is the responsibility of the user to comply with all Federal, State, and Local laws and regulations.