

**MATERIAL SAFETY DATA SHEET**
**SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

|                                       |  |
|---------------------------------------|--|
| #3679 Solvent<br>Product code: 81002D | <i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i> |
| Dell Marking Systems, INC.            | <b>Emergency Telephone Number (24 Hour)</b><br>CHEMTREC 1-800-424-9300 Intl. 1-703-527-3887  |
| 721 Wanda Avenue                      | <b>Telephone Number for Information/FAX:</b><br>(248) 547-7750 / (248) 544-9115  |
| Ferndale, MI 48220                    | <b>Date Prepared:</b> 5/26/11  |
| <b>Product Class:</b> Solvent Thinner |  |

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

| Hazardous Components (Specific Other Limits) |          |             |             |             |       |
|--|----------|-------------|-------------|-------------|-------|
| Chemical Identity, Common Name(s)            | CAS No.  | OSHA PEL    | ACGIH-TLV   | Recommended | Wt%   |
| Toluene                                      | 108-88-3 | TWA 200 ppm | TWA 50 ppm  | No data     | 50-75 |
| Isopropyl Alcohol                            | 67-63-0  | TWA 400 ppm | TWA 200 ppm | No data     | 5-20  |
| Methyl Isobutyl Ketone                       | 108-10-1 | TWA 50 ppm  | TWA 50ppm   | No data     | 5-20  |
| Methyl Ethyl Ketone                          | 78-93-3  | TWA 200 ppm | TWA 200 ppm | No data     | 5-20  |
| Diisobutyl Ketone                            | 108-83-8 | TWA 50 ppm  | TWA 25 ppm  | No data     | 1-5   |

**SECTION 3 HAZARDS IDENTIFICATION**

**EMERGENCY OVERVIEW:** – Clear thin viscosity liquid with solvent odor. **Warning! Flammable liquid and vapor.** Keep away from heat sparks and flames. May cause eye, skin and respiratory tract irritation. If swallowed do not induce vomiting. Get immediate medical attention.

**POTENTIAL HEALTH EFFECTS**

**Eyes:** Liquid is moderately irritating to the eyes.

**Skin:** Liquid is mildly irritating to the skin.

**Ingestion:** Ingestion of liquid may cause vomiting.

**Inhalation:** High concentration of vapors may produce irritation of the respiratory tract, headache, dizziness, and nausea.

**CHRONIC HEALTH EFFECTS**

Prolonged or repeated contact may cause skin sensitization or dermatitis. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating or inhaling this product may be harmful or fatal.

**SECTION 4 FIRST AID MEASURES**

**Eyes** – Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

**Inhalation** – Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

**Skin** – Flush skin with plenty of water. Remove contaminated clothing and shoes.

**Ingestion** – If large quantities of this material are swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

## SECTION 5 FIRE FIGHTING MEASURES

|   |                         |                   |                    |
|---|-------------------------|-------------------|--------------------|
| <b>Flash Point (Method Used)</b><br>32°F ( TCC) | <b>Flammable Limits</b> | <b>LEL</b><br>0.8 | <b>UEL</b><br>11.5 |
|---|-------------------------|-------------------|--------------------|

### Extinguishing Media -

Use water fog, foam, dry chemical or CO2. Use water spray to cool fire-exposed containers and to protect personnel.

### Special Fire Fighting Procedures -

Keep containers cool and vapors down with water spray. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards** – Vapors are heavier than air and may travel along ground, or be moved by ventilation and be ignited by ignition source.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Absorb liquid with non-combustible floor absorbent and place in non-leaking container; seal properly and dispose of properly in compliance with federal, state, and local regulations.

**LARGE SPILL:** Evacuate area of unprotected personnel. Eliminate all ignition sources. Stop spill at source if safe to do so. Handling equipment must be grounded to prevent sparking and static discharge. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Dispose of properly in compliance with federal, state, and local regulations.

## SECTION 7 HANDLING AND STORAGE

**HANDLING:** Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks, flames, static electricity, or other sources of ignition. Ground all equipment to prevent static discharge. Many hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as “autoignition” or ignition temperatures. Ignition temperatures decrease with increasing vapor volume and vapor volume and vapor/air contact time, and are influenced by pressure changes. Ignition of organic chemical vapors may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

### STORAGE:

Keep away from heat, sparks and open flames. Keep out of reach of children. Keep container tightly sealed when not in use. Store in a cool, well-ventilated place away from incompatible materials.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Respiratory Protection (Specify Type) –

Not usually necessary. Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PELs or TLVs are exceeded.

|   |                             |                    |  |      |
|---|-----------------------------|--------------------|--|------|
| <b>Engineering Controls</b>   | <b>Local Exhaust</b>        | Not usually needed | <b>Special</b>   | None |
|   | <b>Mechanical (General)</b> | Yes                | <b>Other</b>   | None |
| <b>Protective Gloves</b> – Chemical resistant gloves if skin contact is possible. Nitrile gloves or consult your safety equipment supplier. |                             |                    | <b>Eye Protection</b> – Not normally required if used as intended. Wear chemical splash goggles in compliance with OSHA regulation if splashing is possible. |      |

### Other Protective Clothing or Equipment -

Not usually necessary. For bulk material, if direct contact is possible, wear apron, boots, face shield, etc. as needed.

### Work/Hygienic Practices -

Follow label instructions. Wash hands after use and before eating, drinking, smoking, using restrooms, etc.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

|                                       |                      |  |                      |
|---------------------------------------|----------------------|--|----------------------|
| <b>Flash Point (Method Used)</b>      | 32°F                 | <b>Flammable Limits LEL/UEL</b>                        | 0.8/11.5             |
| <b>Boiling Point</b>                  | 176°F- 302°F         | <b>Specific Gravity (H<sub>2</sub>O = 1)</b><br>@70° F | 0.8391               |
| <b>Vapor Pressure (mm-Hg @ 70° F)</b> | No Data              | <b>Melting Point</b>                                   | No Data              |
| <b>Vapor Density (AIR = 1)</b>        | Greater than one (1) | <b>Evaporation Rate (Butyl Acetate = 1)</b>            | Greater than one (1) |
| <b>Solubility in Water</b>            | Soluble              | <b>pH</b>  | No Data              |

**Appearance and Odor:** Clear liquid with solvent odor.

**VOC:** This product contains 7.01 lbs/gallon or 100% by weight VOC's.

**SECTION 10 STABILITY AND REACTIVITY**

|                  |                 |   |  |
|------------------|-----------------|---|--|
| <b>Chemical</b>  | <b>Unstable</b> |   | <b>Conditions to Avoid</b> – None known. |
| <b>Stability</b> | <b>Stable</b>   | X |  |

**Incompatibility (Materials to Avoid)** - Avoid strong oxidizing and reducing agents, strong alkalies and strong acids.

**Hazardous Decomposition or Byproducts** -Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.

|                                 |                       |   |                                      |
|---------------------------------|-----------------------|---|--------------------------------------|
| <b>Hazardous Polymerization</b> | <b>May Occur</b>      |   | <b>Conditions to Avoid</b> - No data |
|                                 | <b>Will Not Occur</b> | X |                                      |

**SECTION 11 TOXICOLOGICAL INFORMATION**

|                     | Oral LD50 (Rat) | Dermal LD50 (Rabbit) | Inhalation LC50 (Rat)    |
|---------------------|-----------------|----------------------|--------------------------|
| Toluene             | 636 mg/kg       | 14100 uL/kg          | 49 gm/m <sup>3</sup> /4h |
| Isopropyl Alcohol   | 5045 mg/kg      | 12800 mg/kg          | 16000 ppm/8h             |
| MIBK                | 1900kg (mouse)  | >20 mL/kg            | 100 gm/m <sup>3</sup>    |
| Methyl Ethyl Ketone | 2600-5400 mg/kg | 6400-8000 mg/kg      | >5000 ppm/6H             |
| MIBK                | 1901 kg (mouse) | >20 mL/kg            | 100 gm/m <sup>3</sup>    |
| Diisobutyl Ketone   | 5750 mg/kg      | 16 g/kg              | 2000 ppm/4H              |

Please refer to Section 3 for available information on potential health effects.

**SECTION 12 ECOLOGICAL INFORMATION**

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

**SECTION 13 DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all applicable local, state and federal regulations.

**SECTION 14 TRANSPORT INFORMATION (Not meant to be all inclusive)**

**Important note:** Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.



| Possible Shipping Description(s):                         |   |
|---|---|
| <b>Domestic Highway</b>                                   | <b>Domestic Air Shipments</b>                             |
| <b>Proper Shipping Name:</b> Paint Related Material       | <b>Proper Shipping Name:</b> Paint Related Material       |
| <b>Hazard Class/Subsidiary Hazard:</b> 3 Flammable liquid | <b>Hazard Class/Subsidiary Hazard:</b> 3 Flammable liquid |
| <b>UN/NA No:</b> 1263                                     | <b>UN/NA No:</b> 1263                                     |
| <b>Packing Group:</b> II                                  | <b>Packing Group:</b> II                                  |
| <b>Label Required:</b> Flammable Liquid                   | <b>Label Required:</b> Flammable Liquid                   |

---

**SECTION 15 REGULATORY INFORMATION** (Not meant to be all inclusive - selected regulations represented)

---

**U.S. FEDERAL REGULATIONS:**

**TSCA:** Components of this product are listed on the TSCA inventory.

|                         |             |                         |                        |
|-------------------------|-------------|-------------------------|------------------------|
| <b>Carcinogenicity:</b> | <b>NTP?</b> | <b>IARC Monographs?</b> | <b>OSHA Regulated?</b> |
|                         | No          | No                      | No                     |

**OSHA:** Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**-SECTION 313:** This product contains Methyl Ethyl Ketone (78-93-3), MIBK (108-10-1), Toluene (108-88-3) which is listed and may require reporting under SARA Title III Sec. 313 if used over the threshold reporting quantity. This information must be included in all MSDSs that are copied and distributed for this material.

**STATE REGULATIONS:**

**CALIFORNIA PROPOSITION 65:**

Toluene listed as a terratogen.

**CANADA:**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by these regulations.

-DSL/NDSL

All chemicals in this product are listed on the DSL.

WHMIS Classification: B2, D2A, D2B

---

**SECTION 16 OTHER INFORMATION**

---

MSDS Status: 11-22-2010 Revision: 0

**WARNING!** The use of this product is beyond the control of the manufacturer and distributor; therefore, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The user must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials. The manufacturer and distributor warrant only that this product meets the specifications for such product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER OF THIS PRODUCT. THE MANUFACTURER AND DISTRIBUTOR SHALL BE IN NO WAY RESPONSIBLE FOR THE PROPER USE OF THIS PRODUCT. The sole and exclusive remedy against the manufacturer and distributor for breach of warranty shall be reimbursement of the purchase price of the product in the event that a defective condition of the product shall be found to exist. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

