IMPORTANT: Read this MSDS before handling and disposing of this product, and pass this information on to employees, customers and all users of this product.

24-HOUR EMERGENCY TELEPHONE NUMBER: Infotrac 1-800-535-5053

SECTION I – PRODUCT INFORMATION

PRODUCT NAME: TPKD-SW Black Pigmented MEK Based Ink
CAS NO.:
HAZARD RATING: Health: 3 Fire: 3 Reactivity: 0 PPI:B
Product Class: Ink
Product Code: 9218

SECTION II – INGREDIENT AND HAZARD INFORMATION

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>*METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>50-80</td>
<td>Y</td>
</tr>
<tr>
<td>CYCLOHEXANONE</td>
<td>108-94-1</td>
<td>3-8</td>
<td>Y</td>
</tr>
<tr>
<td>*ISOPROPANOL 99% ANHY</td>
<td>67-63-0</td>
<td>1-5</td>
<td>Y</td>
</tr>
<tr>
<td>*N-METHYL-2-PYRROLIDONE</td>
<td>872-50-4</td>
<td>0.5-1.5</td>
<td>Y</td>
</tr>
</tbody>
</table>

ALL INGREDIENTS IN THIS MIXTURE ARE LISTED ON THE TSCA INVENTORY.

SECTION III – PHYSICAL DATA

Form: Liquid
Appearance/Color: Black
PH Value: Not applicable
Boiling Range: 172 °F – 398°F (77.78°C – 203.33°C)
Vapor Pressure (mmHg): 0 @ 0°F (-17.78°C)
Melting Point: Not Applicable
Evaporation Rate: NA
Vapor Density: NA
Partition Coefficient: NA
% Volatile Weight: 89.22%
% Volatile Volume: 92.85%
Specific Gravity: 0.85183  
VOC: 6.34  
Molecular Weight: N/A  
Heavy Elements (ppm): 0.

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

Flammability Class: IB  
Flash Range: 24°C (-4.44°C)  
Explosive Range: 0%  

EXTINGUISHING MEDIA:  
Carbon Dioxide ----- Dry Chemical ----- Foam ----- Water Fog  
Use water for cooling material stored in vicinity of fire.

SPECIAL FIREFIGHTING PROCEDURES:  
Vapors are heavier than air and may travel along the ground to an ignition source some distance from material handling point. Ignition sources include pilot lights, smoking, heaters, electric motors, sparks from electrical switches and static discharges.  
CAUTION: Never use cutting torch on empty containers! Residual solvent vapor in empty container may explode.  
Application to hot surfaces requires special precautions.  
During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical assistance.

SECTION V – HEALTH HAZARD DATA

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Exposure and dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ISOPROPNOL 99% ANHY</td>
<td></td>
<td>LC50 1500. PPM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50  6.2 PPM</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50  16.4 PPM</td>
</tr>
</tbody>
</table>

PERMISSIBLE EXPOSURE LEVEL:  
Refer to Section II

EFFECTS OF OVEREXPOSURE:

EYES: Can cause redness, irritation, swelling and blurred vision.  
SKIN: Prolonged or repeated contact can cause slight ion or dermatitis.  
BREATHING: Excessive inhalation of vapors and/or spray mist can cause respiratory irritation, dizziness, weakness, fatigue, nausea, headache, unconsciousness and even asphyxiation.  
SWALLOWING: Can cause gastrointestinal irritation, nausea, vomiting and diarrhea; aspiration of material into the lungs can cause chemical pneumonitis which can be fatal.  

FIRST AID:

EYES: Flush with large amounts of water for 15 minutes. Lift eyelids occasionally, get prompt medical attention.  
SKIN: Wash thoroughly with soap and water, remove contaminated clothing promptly; wash clothing before reuse. Consult physician if irritation persists.  
SWALLOWING: Since this product may contain materials which can cause lung damage is aspirated into the lungs, the decision to induce vomiting or not must be made by a physician after careful consideration of all materials ingested.  
INHALATION: Move affected person to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet, and get medical attention. Consult a physician.
SECTION VI – REACTIVITY DATA

STABILITY: This product is stable.
HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.
INCOMPATIBILITY: Avoid contact with strong oxidizers (e.g., nitric acid)
CONDITIONS TO AVOID: Keep away from heat and open flame.
HAZARDOUS DECOMPOSITION PRODUCTS: May form carbon monoxide and dioxide, various hydrocarbons, etc.

SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Small Spill: Absorb liquid with rags, floor absorbent, vermiculite or other absorbent materials and transfer to hood. Large Spill: Eliminate all ignition sources. Dike area of spill to prevent spreading. Ventilate area if indoors. Pump liquid into salvage tank. Remaining liquid may be taken up with sand, floor absorbent or other absorbent material and shoveled into containers. Prevent run-off to sewers and bodies of water. Notify proper authorities as required by local, state and federal regulations.
WASTE DISPOSAL METHOD: Dispose of in accordance with federal, state and local regulations.

SECTION VIII – SPECIAL PROTECTION INFORMATION

Occupational exposure limits

<table>
<thead>
<tr>
<th></th>
<th>ACGIH TLV</th>
<th>ACGIH TLV-C</th>
<th>ACGIH STEL</th>
<th>OSHA STEL</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>*METHYL ETHYL KETONE</td>
<td>200 PPM</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>CYCLOHEXANONE</td>
<td>25 PPM</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>*ISOPROPANOL 99% ANHY</td>
<td>400 PPM</td>
<td>NE</td>
<td>NE</td>
<td>500 PPM</td>
<td>NE</td>
</tr>
<tr>
<td>*N-METHYL-2-PYRROLLIDONE</td>
<td>100 PPM</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

RESPIRATORY PROTECTION: In outdoor or open areas with unrestricted ventilation approved chemical/mechanical filters designed to remove a combination of particulates and vapor.

VENTILATION: Provide sufficient ventilation in volume and pattern to keep air contaminant concentration below current applicable OSHA permissible exposure limit or ACGIH TLV limit, and volatiles below lower explosive limit. Heavy solvent vapors should be removed from the lower levels of area, and all ignition sources (non-explosion proof equipment) should be eliminated if flammable mixtures will be encountered. Remove decomposition products formed during welding or flame cutting of surfaces coated with this product. For baking finishes- vent vapors emitted on heating.

PROTECTIVE GLOVES: Wear resistant gloves such as: nitrile rubber.

EYE PROTECTION: Chemical splash goggles in compliance with OSHA regulations are advised; however, OSHA regulations also permit other type safety glasses (consult your safety equipment supplier).

OTHER PROTECTIVE EQUIPMENT: Normal protective clothing. Wash contaminated clothing before reuse.

SECTION IX – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
Do not drop containers. Avoid heat, sparks and open flame. Store large quantities only in buildings designed to comply with OSHA 1910.106. Never use pressure to empty. Avoid breathing sanding dust. Do not handle until manufacturers safety precautions have been read and understood.

OTHER PRECAUTIONS: The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable and suitable to their circumstances.
SECTION X – ADDITIONAL REGULATORY INFORMATION

SARA TITLE III SECTION 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>*METHYL ETHYL KETONE</td>
<td>78-93-3</td>
<td>78.18</td>
</tr>
<tr>
<td>*ISOPROPANOL 99% ANHY</td>
<td>67-63-0</td>
<td>3.39</td>
</tr>
<tr>
<td>*N-METHYL-2-PYRROLIDONE</td>
<td>872-50-4</td>
<td>1.05</td>
</tr>
</tbody>
</table>

DISCLAIMER OF LIABILITY

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