1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** TES-130 : All Colors
- **Relevant identified uses of the substance or mixture and uses advised against**
  - **Application of the substance / the preparation** Printing inks
- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** PANNIER CORPORATION
    - Phone : 412-323-4900
    - Email: sales@pannier.com
- **24 Hr Emergency telephone number:** Infotrac: 1-800-535-5053

2 Composition/information on ingredients

- **Chemical characterization:** Mixtures
  - **Description:** Mixture of the substances listed below with nonhazardous additions.
  - **Dangerous components:**
    - 64-17-5 ethanol 60-80%
    - 67-63-0 isopropyl alcohol 5-20%
    - 71-23-8 1-propanol 0-5%
  - **Additional information** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - **Irritant:** Irritating to eyes.
  - **Highly flammable:** Highly flammable.
- **Information concerning particular hazards for human and environment:**
  The product has to be labelled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.
- **Classification system:** The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

4 Label elements

- **Labelling according to EU guidelines:** The product has been classified and marked in accordance with directives on hazardous materials.
- **Code letter and hazard designation of product:** Irritant Highly flammable
- **Risk phrases:** Highly flammable. Irritating to eyes.
- **Safety phrases:**
  - Keep out of the reach of children.
  - Keep container tightly closed and in a well-ventilated place.
  - Keep away from sources of ignition - No smoking.
  - Do not breathe gas/fumes/vapour/spray.
  - Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point
  - If swallowed, seek medical advice immediately and show this container or label.
Classification system
  · NFPA Ratings (scale 0-4)
    Health = 1
    Fire = 3
    Reactivity = 0
  · HMIS Rating (scale 0-4)
    Health - 1
    Flammability - 3
    Reactivity - 0

Routes of Entry
  · Ingestion
  · Inhalation

Target Organs
  · Eyes

Irritancy
  · Eyes
  · Respiratory Tract
  · Skin

Sensitizing Capability
  None known

Reproductive Effects
  None known

Cancer Information
  Not known to be carcinogenic.

Other hazards

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

First aid measures
  · Description of first aid measures
  · After inhalation: Supply fresh air; consult doctor in case of complaints.
  · After skin contact: Generally the product does not irritate the skin.
  · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
  · After swallowing: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

Firefighting measures
  · Extinguishing media
  · Suitable extinguishing agents CO2, sand, extinguishing powder. Do not use water.
  · For safety reasons unsuitable extinguishing agents Water. Water with full jet.
  · Advice for firefighters

Accidental release measures
  · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
  · Environmental precautions: Do not allow product to reach sewage system or any water course. Prevent seepage into sewage system, workpits and cellars. Inform respective authorities in case of seepage into water course or sewage system.
Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents.

Reference to other sections: See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7 Handling and storage

Handling

Precautions for safe handling: Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.

Maximum storage temperature: 120 F (49 C)

Minimum storage temperature: 35 F (2 C)

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

64-17-5 ethanol

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<tr>
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<th>PEL</th>
<th>REL</th>
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<tbody>
<tr>
<td>TLV</td>
<td>1900 mg/m³, 1000 ppm</td>
<td>1900 mg/m³, 1000 ppm</td>
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<tr>
<td></td>
<td>Short-term value: 1880 mg/m³, NIC-1000 ppm</td>
<td>Long-term value: 1880 mg/m³, 1000 ppm</td>
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<tr>
<td></td>
<td>NIC-A3</td>
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</table>

67-63-0 isopropyl alcohol

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<tbody>
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<td>TLV</td>
<td>980 mg/m³, 400 ppm</td>
<td>Short-term value: 1225 mg/m³, 500 ppm</td>
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<tr>
<td></td>
<td>Long-term value: 980 mg/m³, 400 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short-term value: 984 mg/m³, 400 ppm</td>
<td>Long-term value: 492 mg/m³, 200 ppm</td>
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<tr>
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</table>

71-23-8 1-propanol

<table>
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<th>REL</th>
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</thead>
<tbody>
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<td>TLV</td>
<td>500 mg/m³, 200 ppm</td>
<td>Short-term value: 625 mg/m³, 250 ppm</td>
</tr>
<tr>
<td></td>
<td>Long-term value: 500 mg/m³, 200 ppm</td>
<td>Skin</td>
</tr>
<tr>
<td></td>
<td></td>
<td>246 mg/m³, 100 ppm</td>
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</tbody>
</table>

Exposure controls

Personal protective equipment

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes. Avoid contact with the eyes and skin.

Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
Protection of hands:
Protective gloves. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- Neoprene gloves
- Rubber gloves

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Not suitable are gloves made of the following materials: Leather gloves

Eye protection: Tightly sealed goggles.

9 Physical and chemical properties
Information on basic physical and chemical properties

General Information
Appearance:
- Form: Liquid
- Color: According to product specification
- Odor: Characteristic

Change in condition
- Melting point/Melting range: undetermined
- Boiling point/Boiling range: 78°C (172°F)
- Flash point: 13°C (55°F)
- Ignition temperature: 425°C (797°F)
- Auto igniting: Product is not self igniting.
- Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

Explosion limits:
- Lower: 2.0 Vol %
- Upper: 15.0 Vol %
- Vapor pressure at 20°C (68°F): 59 hPa (44 mm Hg)
- Density at 20°C (68°F): 0.798 g/cm³ (6.659 lbs/gal)
- Solubility in / Miscibility with Water: Not miscible or difficult to mix

Solvent content:
- Organic solvents: 89 - 94 %
- Solids content: 6 - 11 %

10 Stability and reactivity
Reactivity
Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known
- Hazardous decomposition products: No dangerous decomposition products known

11 Toxicological information
Information on toxicological effects
Acute toxicity:
- Primary irritant effect:
12 Ecological information

- **Toxicity**
  - **Acquatic toxicity:** No further relevant information available.
  
- **Additional ecological information:**
  - **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Comply with all Federal, State, and Local regulations regarding disposal.

- **Uncleaned packagings:**
  - **Recommendation:** Disposal must be made according to official regulations. Comply with all Federal, State, and Local regulations regarding disposal.

14 Transport information

- **DOT regulations:**
  - **Hazard class:** 3
  - **Identification number:** UN1210
  - **Packing group:** II
  - **ERG:** #129
  - **Proper shipping name (technical name):** PRINTING INK
  - **Label:** 3
  
- **Land transport ADR/RID (cross-border)**
  - **ADR/RID class:** 3 Flammable liquids
  - **Danger code (Kemler):** 33
  - **UN-Number:** 1210
  - **Packaging group:** II
  - **UN proper shipping name:** 1210 PRINTING INK (vapor pressure at 50ºC at most 110 kPa)

- **Maritime transport IMDG:**
  - **IMDG Class:** 3
  - **UN Number:** 1210
  - **Label:** 3
  - **Packaging group:** II
  - **EMS Number:** F-E,S-D
  - **Marine pollutant:** No
  - **Proper shipping name:** PRINTING INK

- **Air transport ICAO-TI and IATA-DGR:**
  - **ICAO/IATA Class:** 3
  - **UN/ID Number:** 1210
  - **Label:** 3
  - **Packaging group:** II
15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Cancerogenity categories**
- **EPA (Environmental Protection Agency)**
  108-88-3 toluene II
  67-63-0 isopropyl alcohol 3
  108-88-3 toluene 3
- **IARC (International Agency for Research on Cancer)**
  67-63-0 isopropyl alcohol 3
  108-88-3 toluene 3
- **NTP (National Toxicology Program)** None of the ingredients is listed.
- **TLV (Threshold Limit Value established by ACGIH)**
  64-17-5 ethanol A4
  67-63-0 isopropyl alcohol A4
  71-23-8 1-propanol A4
  108-88-3 toluene A4
- **MAK (German Maximum Workplace Concentration)**
  64-17-5 ethanol 5
- **NIOSH-Ca (National Institute for Occupational Safety and Health)** All ingredients are listed
- **OSHA-Ca (Occupational Safety & Health Administration)** All ingredients are listed.
- **Product related hazard information**: The product has been classified and marked in accordance with directives on hazardous materials.
  - **Hazard symbols**: Irritant
  - **Risk phrases**: Highly flammable. Irritating to eyes.
  - **Safety phrases**: Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapour/spray. Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. If swallowed, seek medical advice immediately and show this container or label.

- **National regulations**
  - **Water hazard class**: Water hazard class 1 (Self-assessment): slightly hazardous for water.
  - **Other regulations, limitations and prohibitive regulations**
    - **OSHA Regulations** Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed
      OSHA Specifically Regulated Substance (29 CFR 1910.): Not listed
  - **Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Section 313**: 67-63-0 Isopropyl alcohol is only reportable under SARA if you are manufacturing this product
  - **CONEG**: This product has not been tested for heavy metals covered under the various CONEG laws. However, raw materials used to make this product do not contain mercury, lead, cadmium, or hexavalent chromium and none are added during manufacture.
  - **Toxic Substances Control Act TSCA Status**: All components of this product are listed in the EPA’s Inventory of Chemical Substances as required under the Toxic Substances Control Act (TSCA).
· California Proposition 65 (Chemicals known to cause cancer): This product contains no ingredients on the California Proposition 65 List known to cause cancer.
· California Proposition 65 (Chemicals known to cause reproductive toxicity): This product contains no ingredients on the California Proposition 65 List known to cause reproductive toxicity.
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

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