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

- 1.1 Product identifier
  - Trade name: Blue Marking Ink Kleenscribe Layout Dye
  - Article number: 1610

- 1.3 Details of the supplier of the Safety Data Sheet
  - Manufacturer/Supplier:
    The L.S. Starrett Company
    121 Crescent St.
    Athol, MA 01331
    (978) 249-3551

- 1.4 Emergency telephone number:
  - ChemTel Inc.
    (800)255-3924, +1 (813)248-0585

2 Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    - GHS02 flame
      Flam. Liq. 2 H225 Highly flammable liquid and vapour.
    - GHS06 skull and crossbones
      Acute Tox. 3 H301 Toxic if swallowed.
    - GHS08 health hazard
      Repr. 2 H361d Suspected of damaging the unborn child.
      STOT SE 1 H370+H336 Causes damage to organs. May cause drowsiness or dizziness.
      Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
    - GHS07
      Acute Tox. 4 H312 Harmful in contact with skin.
      Acute Tox. 4 H332 Harmful if inhaled.
      Eye Irrit. 2 H319 Causes serious eye irritation.

(Contd. on page 2)
### Safety Data Sheet

according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 25.05.2012    Revision: 25.05.2012

**Trade name:** Blue Marking Ink Kleenscribe Layout Dye

(Contd. of page 1)

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - T; Toxic
    - R23/24/25-39/23/24/25: Toxic by inhalation, in contact with skin and if swallowed. Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
  - Xn; Harmful
    - R63-65: Possible risk of harm to the unborn child. Harmful: may cause lung damage if swallowed.
  - Xi; Irritant
    - R36: Irritating to eyes.
  - F; Highly flammable
    - R11: 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 is according to the latest editions of the EU-lists, and extended by company and literature data.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The product is classified and labelled according to the CLP regulation.
  - **Hazard pictograms**
    - GHS02 GHS06 GHS08
  - **Signal word** Danger
  - **Hazard-determining components of labelling:**
    - methanol
    - toluene
  - **Hazard statements**
    - H225 Highly flammable liquid and vapour.
    - H301 Toxic if swallowed.
    - H312+H332 Harmful in contact with skin or if inhaled
    - H319 Causes serious eye irritation.
    - H361d Suspected of damaging the unborn child.
    - H370+H336 Causes damage to organs. May cause drowsiness or dizziness.
    - H304 May be fatal if swallowed and enters airways.
    - Can become highly flammable in use.
    - Safety data sheet available on request.

(Contd. on page 3)
Precautionary statements:
- P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P281 Use personal protective equipment as required.
- P240 Ground/bond container and receiving equipment.
- P233 Keep container tightly closed.
- P242 Use only non-sparking tools.
- P243 Take precautionary measures against static discharge.
- P264 Wash thoroughly after handling.
- P270 Do no eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P201 Obtain special instructions before use.
- P240 Ground/bond container and receiving equipment.
- P243 Take precautionary measures against static discharge.
- P264 Wash thoroughly after handling.
- P270 Do no eat, drink or smoke when using this product.
- P271 Use only outdoors or in a well-ventilated area.
- P201 Obtain special instructions before use.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
- P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment (see on this label).
- P307+P311 IF exposed: Call a POISON CENTER or doctor/physician.
- P322 Specific measures (see on this label).
- P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P363 Wash contaminated clothing before reuse.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P337+P313 If eye irritation persists: Get medical advice/attention.
- P330 Rinse mouth.
- P331 Do NOT induce vomiting.
- P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.
- P302+P352 IF ON SKIN: Wash with plenty of soap and water.
- P405 Store locked up.
- P403+P235 Store in a well-ventilated place. Keep cool.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard description:

WHMIS-symbols:
- B2 - Flammable liquid
- D1A - Very toxic material causing immediate and serious toxic effects
- D2A - Very toxic material causing other toxic effects
- D2B - Toxic material causing other toxic effects

(Contd. on page 4)
2.3 Other hazards

Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

#### 3.2 Mixtures

**Description:** Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Index number</th>
<th>Component</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>200-578-6</td>
<td>603-002-00-5</td>
<td>Ethanol</td>
<td>25-50% F R11, Flam. Liq. 2, H225</td>
</tr>
<tr>
<td>67-56-1</td>
<td>200-659-6</td>
<td>603-001-00-X</td>
<td>Methanol</td>
<td>2,5-10% T R23/24/25-39/24/25, F R11, Flam. Liq. 2, H225, Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331; STOT SE 1, H370</td>
</tr>
<tr>
<td>141-78-6</td>
<td>205-500-4</td>
<td>607-022-00-5</td>
<td>Ethyl acetate</td>
<td>2,5-10% Xi R36, F R11, Flam. Liq. 2, H225, Eye Irrit. 2, H319; STOT SE 3, H336</td>
</tr>
<tr>
<td>9004-70-0</td>
<td>603-037-0</td>
<td></td>
<td>Nitrocellulose, colloided, granular</td>
<td>2,5-10% E R1-3, Unst. Expl., H200</td>
</tr>
</tbody>
</table>
Trade name: Blue Marking Ink Kleenscribe Layout Dye

| CAS: 67-63-0 | propan-2-ol | Xi R36; F R11 | R67 | Flam. Liq. 2; H225 | Eye Irrit. 2, H319; STOT SE 3, H336 | 2,5-10% |
| EINECS: 200-661-7 | Index number: 603-117-00-0 |

| CAS: 108-88-3 | toluene | Xi R38; F R11 | R67 | Flam. Liq. 2; H225 | Repr. 2, H361d; STOT RE 2, H373; Asp. Tox. 1, H304 | 2,5-10% |
| EINECS: 203-625-9 | Index number: 601-021-00-3 |

| CAS: 64742-89-8 | Solvent naphtha (petroleum), light aliph. | Xn R65 | Mutā. 1B; H340; Carc. 1B; H350; Asp. Tox. 1, H304 | 2,5-10% |
| EINECS: 265-192-2 | Index number: 649-267-00-0 |

| CAS: 67-64-1 | acetone | Xi R36; F R11 | R66-67 | Flam. Liq. 2; H225 | Eye Irrit. 2, H319; STOT SE 3, H336 | 2,5-10% |
| EINECS: 200-662-2 | Index number: 606-001-00-8 |

*Additional information:* For the wording of the listed risk phrases refer to section 16.

## 4 First aid measures

### 4.1 Description of first aid measures

**General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Immediately remove any clothing soiled by the product.
Remove breathing equipment only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
Take affected persons out into the fresh air.

**After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.

**After eye contact:**
Remove contact lenses if worn.
Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**
Do not induce vomiting; call for medical help immediately.
Rinse out mouth and then drink plenty of water.
A person vomiting while laying on their back should be turned onto their side.

(Contd. on page 6)
34.2.2

· 4.2 Most important symptoms and effects, both acute and delayed
  Breathing difficulty
  Headache
  Dizziness
  Thirst
  Gastric or intestinal disorders
  Acidosis
  Unconsciousness
  · Hazards
    Danger of impaired breathing.
    Danger of disturbed cardiac rhythm.
    Danger of convulsion.
    Condition may deteriorate with alcohol consumption.
  · 4.3 Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Firefighting measures

· 5.1 Extinguishing media
  · Suitable extinguishing agents:
    CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  5.2 Special hazards arising from the substance or mixture
    Can form explosive gas-air mixtures.
    Formation of toxic gases is possible during heating or in case of fire.
  · 5.3 Advice for firefighters
  · Protective equipment:
    Wear self-contained respiratory protective device.
    Wear fully protective suit.
  · Additional information Cool endangered receptacles with water spray.

6 Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.
  Use respiratory protective device against the effects of fumes/dust/aerosol.
  Ensure adequate ventilation
  · 6.2 Environmental precautions:
    Prevent from spreading (e.g. by damming-in or oil barriers).
    Do not allow to enter sewers/ surface or ground water.
  · 6.3 Methods and material for containment and cleaning up:
    Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
    Send for recovery or disposal in suitable receptacles.
    Dispose contaminated material as waste according to item 13.
    Ensure adequate ventilation.
  · 6.4 Reference to other sections
    See Section 7 for information on safe handling.
7 Handling and storage

7.1 Precautions for safe handling
Avoid splashes or spray in enclosed areas.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.

Information about fire - and explosion protection:
Flammable gas-air mixtures may form in empty receptacles.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

7.2 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 container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.

7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

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

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>64-17-5 ethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
</tr>
<tr>
<td>REL (USA)</td>
</tr>
<tr>
<td>TLV (USA)</td>
</tr>
<tr>
<td>EL (Canada)</td>
</tr>
<tr>
<td>EV (Canada)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>123-86-4 n-butyl acetate</th>
</tr>
</thead>
</table>

(Contd. on page 8)
## Trade name: Blue Marking Ink Kleenscribe Layout Dye

### 67-56-1 methanol

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>710 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 950 mg/m³, 200 ppm Long-term value: 713 mg/m³, 150 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 950 mg/m³, 200 ppm Long-term value: 710 mg/m³, 150 ppm</td>
</tr>
</tbody>
</table>

### 67-56-1 methanol

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV (EU)</td>
<td>260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin</td>
<td></td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>Skin; BEI</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 250 ppm Long-term value: 200 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm</td>
</tr>
</tbody>
</table>

### 141-78-6 ethyl acetate

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>1400 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>1400 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>1440 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>150 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>1,440 mg/m³, 400 ppm</td>
</tr>
</tbody>
</table>

### 67-63-0 propan-2-ol

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm</td>
</tr>
<tr>
<td>BEI</td>
<td></td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 400 ppm Long-term value: 200 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 400 ppm Long-term value: 200 ppm</td>
</tr>
</tbody>
</table>
Safety Data Sheet  
according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

Printing date 25.05.2012  Revision: 25.05.2012

Trade name: Blue Marking Ink Kleenscribe Layout Dye

<table>
<thead>
<tr>
<th>108-88-3 toluene</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>PEL (USA)</td>
<td>Short-term value: C 300; 500* ppm  &lt;br&gt;Long-term value: 200 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>Short-term value: 560 mg/m³, 150 ppm  &lt;br&gt;Long-term value: 375 mg/m³, 100 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>75 mg/m³, 10 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>20 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>10 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>67-64-1 acetone</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IOELV (EU)</td>
<td>1210 mg/m³, 500 ppm</td>
</tr>
<tr>
<td>PEL (USA)</td>
<td>2400 mg/m³, 1000 ppm</td>
</tr>
<tr>
<td>REL (USA)</td>
<td>590 mg/m³, 250 ppm</td>
</tr>
<tr>
<td>TLV (USA)</td>
<td>Short-term value: (1782) NIC-1187 mg/m³, (750) NIC-500 ppm  &lt;br&gt;Long-term value: (1188) NIC-475 mg/m³, (500) NIC-200 ppm</td>
</tr>
<tr>
<td>EL (Canada)</td>
<td>Short-term value: 500 ppm  &lt;br&gt;Long-term value: 250 ppm</td>
</tr>
<tr>
<td>EV (Canada)</td>
<td>Short-term value: 750 ppm  &lt;br&gt;Long-term value: 500 ppm</td>
</tr>
</tbody>
</table>

- **Additional information:** The lists valid during the making were used as basis.
- **8.2 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.
    - Store protective clothing separately.
    - Avoid contact with the eyes.
    - Avoid contact with the eyes and skin.
  - **Respiratory protection:**
    - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
  - **Protection of hands:**
    - Protective gloves

    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    - 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 breakthrough time has to be found out by the manufacturer of the protective gloves and has to
be observed.

- **Eye protection:**

Safety glasses

Goggles recommended during refilling

- **Body protection:** Impervious protective clothing

### 9 Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- **General Information**

- **Appearance:**
  - **Form:** Liquid
  - **Colour:** Blue

- **Odour:** Characteristic

- **Odour threshold:** Not determined.

- **pH-value:** Not determined.

- **Change in condition**
  - **Melting point/Melting range:** Undetermined.
  - **Boiling point/Boiling range:** 56°C

- **Flash point:** -20°C

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 370°C

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive
  air/vapour mixtures are possible.

- **Explosion limits:**
  - **Lower:** 1.2 Vol %
  - **Upper:** 44.0 Vol %

- **Vapour pressure at 20°C:** 128 hPa

- **Density at 20°C:** 0.89 g/cm³

- **Relative density** Not determined.

- **Vapour density** Not determined.
Trade name: Blue Marking Ink Kleenscribe Layout Dye

- **Evaporation rate**: Not determined.
- **Solubility in / Miscibility with water**: Fully miscible.
- **Segregation coefficient (n-octanol/water)**: Not determined.
- **Viscosity**:
  - Dynamic: Not determined.
  - Kinematic: Not determined.
- **9.2 Other information**: No further relevant information available.

### 10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided**: No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
  - Can react violently with oxygen rich (oxidizing) material. Danger of Explosion.
  - Flammable.
  - Danger of receptacles bursting because of high vapour pressure when heated.
  - Reacts with strong acids.
  - Reacts with certain metals.
  - Forms flammable gases/fumes.
- **10.4 Conditions to avoid**: No further relevant information available.
- **10.5 Incompatible materials**: No further relevant information available.
- **10.6 Hazardous decomposition products**: No dangerous decomposition products known.
  - Flammable gases/vapours
  - Carbon monoxide and carbon dioxide
  - Nitrogen oxides
  - Small quantities of formaldehyde may be formed

### 11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**:
  - **LD/LC50 values relevant for classification**:
    - **67-56-1 methanol**
      - Oral LD50 5628 mg/kg (rat)
      - Dermal LD50 15800 mg/kg (rabbit)
    - **108-88-3 toluene**
      - Oral LD50 5000 mg/kg (rat)
Trade name: Blue Marking Ink Kleenscribe Layout Dye

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal LD50</td>
<td>12124 mg/kg (rabbit)</td>
</tr>
<tr>
<td>Inhalative LC50/4 h</td>
<td>5320 mg/l (mouse)</td>
</tr>
</tbody>
</table>

- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect.
  - **Sensitization:** No sensitizing effects known.

- **Additional toxicological information:**
  The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
  - **Toxic**
  - **Irritant**
  - Vapours have narcotic effect.

**12 Ecological information**

- **12.1 Toxicity**
  - **Aquatic toxicity:** No further relevant information available.

- **12.2 Persistence and degradability**
  Moderately /partly biodegradable

- **12.3 Bioaccumulative potential**
  Not worth-mentioning accumulating in organisms

- **12.4 Mobility in soil**
  No further relevant information available.

- **Additional ecological information:**
  - **General notes:**
    Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water
    Do not allow product to reach ground water, water course or sewage system, even in small quantities.
    Danger to drinking water if even extremely small quantities leak into the ground.

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

- **12.6 Other adverse effects**
  No further relevant information available.

**13 Disposal considerations**

- **13.1 Waste treatment methods**
  - **Recommendation**
    Hand over to hazardous waste disposers.
    Must be specially treated adhering to official regulations.
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.
    After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.
### 14 Transport information

<table>
<thead>
<tr>
<th>14.1 UN-Number</th>
<th>DOT, ADR, IMDG, IATA</th>
<th>UN1210</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.2 UN proper shipping name</td>
<td>DOT, IMDG, IATA</td>
<td>PRINTING INK</td>
</tr>
<tr>
<td></td>
<td>ADR</td>
<td>1210 PRINTING INK</td>
</tr>
<tr>
<td>14.3 Transport hazard class(es)</td>
<td>DOT</td>
<td>Class 3 Flammable liquids.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Label 3</td>
</tr>
<tr>
<td></td>
<td>ADR</td>
<td>Class 3 (F1) Flammable liquids.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Label 3</td>
</tr>
<tr>
<td></td>
<td>IMDG, IATA</td>
<td>Class 3 Flammable liquids.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Label 3</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>DOT, ADR, IMDG, IATA</td>
<td>II</td>
</tr>
<tr>
<td>14.5 Environmental hazards:</td>
<td>Marine pollutant:</td>
<td>No</td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Danger code (Kemler):</td>
<td>Warning: Flammable liquids.</td>
</tr>
<tr>
<td></td>
<td>EMS Number:</td>
<td>F-E,S-D</td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>Not applicable.</td>
<td></td>
</tr>
</tbody>
</table>
Trade name: Blue Marking Ink Kleenscribe Layout Dye

Transport/Additional information:
- ADR
- Tunnel restriction code: D/E
- UN "Model Regulation": UN1210, PRINTING INK, 3, I

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- United States (USA)
  - SARA
    - Section 355 (extremely hazardous substances):
      None of the ingredients is listed.
    - Section 313 (Specific toxic chemical listings):
      67-56-1 methanol
      67-63-0 propan-2-ol
      108-88-3 toluene
  - TSCA (Toxic Substances Control Act):
    All ingredients are listed.
  - Proposition 65 (California):
    - Chemicals known to cause cancer:
      None of the ingredients is listed.
    - Chemicals known to cause reproductive toxicity for females:
      108-88-3 toluene
    - Chemicals known to cause reproductive toxicity for males:
      None of the ingredients is listed.
    - Chemicals known to cause developmental toxicity:
      64-17-5 ethanol
      67-56-1 methanol
      108-88-3 toluene
  - Carcinogenic Categories
    - EPA (Environmental Protection Agency)
      108-88-3 toluene II
      67-64-1 acetone I
  - TLV (Threshold Limit Value established by ACGIH)
    64-17-5 ethanol A3
    67-63-0 propan-2-ol A4
    108-88-3 toluene A4

(Contd. on page 15)
Safety Data Sheet
according to 1907/2006/EC (REACH),
1272/2008/EC (CLP), and GHS

Printing date 25.05.2012
Revision: 25.05.2012

Trade name: Blue Marking Ink Kleenscribe Layout Dye

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
<th>Source</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>67-64-1</td>
<td></td>
<td>A4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**
  None of the ingredients is listed.

- **OSHA-Ca (Occupational Safety & Health Administration)**
  None of the ingredients is listed.

- **Canada**
  - **Canadian Domestic Substances List (DSL)**
    All ingredients are listed.
  - **Canadian Ingredient Disclosure list (limit 0.1%)**
    | CAS Number | Ingredient |
    |------------|------------|
    | 64-17-5    | ethanol    |
  - **Canadian Ingredient Disclosure list (limit 1%)**
    | CAS Number | Ingredient |
    |------------|------------|
    | 123-86-4   | n-butyl acetate |
    | 67-56-1    | methanol   |
    | 141-78-6   | ethyl acetate |
    | 67-63-0    | propan-2-ol |
    | 108-88-3   | toluene    |
    | 67-64-1    | acetone    |

- **15.2 Chemical safety assessment**: A Chemical Safety Assessment has not been carried out.

**16 Other information**
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
  - H200 Unstable explosives.
  - H225 Highly flammable liquid and vapour.
  - H226 Flammable liquid and vapour.
  - H301 Toxic if swallowed.
  - H304 May be fatal if swallowed and enters airways.
  - H311 Toxic in contact with skin.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H331 Toxic if inhaled.
  - H336 May cause drowsiness or dizziness.
  - H340 May cause genetic defects.
  - H350 May cause cancer.
  - H361d Suspected of damaging the unborn child.
  - H370 Causes damage to organs.
  - H373 May cause damage to organs through prolonged or repeated exposure.
  - R1 Explosive when dry.
  - R10 Flammable.
  - R11 Highly flammable.

(Contd. on page 16)
Trade name: Blue Marking Ink Kleenscribe Layout Dye

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
R36 Irritating to eyes.
R38 Irritating to skin.
R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R63 Possible risk of harm to the unborn child.
R65 Harmful: may cause lung damage if swallowed.
R66 Repeated exposure may cause skin dryness or cracking.
R67 Vapours may cause drowsiness and dizziness.

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent