SAFETY DATA SHEET
DYNE TEST SOLUTIONS TYPE "A" 30-33 DYNES/cm²(mN/m)

Compilation date: 03/01/2014
Revision date: 26/05/2017
Revision No: 3

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

1.1. Product identifier

Product name: DYNE TEST SOLUTIONS TYPE "A" 30-33 DYNES/cm²(mN/m)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of substance / mixture: Industrial Use

1.3. Details of the supplier of the safety data sheet

Company name: Dyne Testing Ltd
Newton House
5 Parkside Court
Greenhough Road
Lichfield
Staffordshire
WS13 7FE, UK

Tel: +44(0)1543 411460
Fax: +44(0)1543 415140
Email: sales@dynetesting.com

1.4. Emergency telephone number

Emergency tel: +44(0)1543 411460
(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Repr. 1B: H360FD; Acute Tox. 4: H302+312+332; Flam. Liq. 3: H226

Most important adverse effects: Flammable liquid and vapour. Harmful if swallowed, in contact with skin or if inhaled.
May damage fertility. May damage the unborn child.

2.2. Label elements

Label elements under CLP:

Hazard statements: H226: Flammable liquid and vapour.
H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.
H360FD: May damage fertility. May damage the unborn child.

Signal words: Danger

Hazard pictograms: GHS02: Flame
GHS07: Exclamation mark
GHS08: Health hazard

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Precautionary statements:
P260: Do not breathe vapours.
P308+313: IF exposed or concerned: Get medical advice/attention.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing.
Rinse skin with water/shower.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

2.3. Other hazards

Other hazards: In use, may form flammable / explosive vapour-air mixture.
PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

<table>
<thead>
<tr>
<th>2-ETHOXYETHANOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>203-804-1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FORMAMIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>200-842-0</td>
</tr>
</tbody>
</table>

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin.
Drench the affected skin with running water for 10 minutes or longer if substance is still on skin. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Consult a doctor.

Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

Skin contact: There may be irritation and redness at the site of contact.
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Eye contact: There may be irritation and redness. The eyes may water profusely.
Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 5: Fire-fighting measures

5.1. Extinguishing media
Extinguishing media: Alcohol or polymer foam. Carbon dioxide. Dry chemical powder. Use water spray to cool containers.

5.2. Special hazards arising from the substance or mixture

5.3. Advice for fire-fighters
Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Personal precautions: Refer to section 8 of SDS for personal protection details. If outside do not approach from downwind. If outside keep bystanders upwind and away from danger point. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid. Eliminate all sources of ignition.

6.2. Environmental precautions
Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up
Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method. Do not use equipment in clean-up procedure which may produce sparks.

6.4. Reference to other sections
Reference to other sections: Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling
Handling requirements: Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.
Do not handle in a confined space. Avoid the formation or spread of mists in the air. Smoking is forbidden. Use non-sparking tools.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in cool, well ventilated area. Keep container tightly closed. Keep away from sources of ignition. Prevent the build up of electrostatic charge in the immediate area. Ensure lighting and electrical equipment are not a source of ignition.

7.3. Specific end use(s)

**Specific end use(s):** No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

**Hazardous ingredients:**

**2-ETHOXYETHANOL**

<table>
<thead>
<tr>
<th>Workplace exposure limits:</th>
<th>Respirable dust</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>8 hour TWA</td>
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<tr>
<td>UK</td>
<td>8 mg/m3</td>
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**FORMAMIDE**

<table>
<thead>
<tr>
<th>State</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
<th>8 hour TWA</th>
<th>15 min. STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK</td>
<td>37 mg/m3</td>
<td>56 mg/m3</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**DNEL/PNEC Values**

**DNEL / PNEC:** No data available.

8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure lighting and electrical equipment are not a source of ignition.

**Respiratory protection:** Respiratory protective device with particle filter.

**Hand protection:** Impermeable gloves.

**Eye protection:** Safety glasses. Ensure eye bath is to hand.

**Skin protection:** Impermeable protective clothing.

**Environmental:** Refer to specific Member State legislation for requirements under Community environmental legislation.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

**State:** Liquid

**Colour:** Colourless

**Odour:** Odourless

**Evaporation rate:** No data available.

**Oxidising:** Non-oxidising (by EC criteria)
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Solubility in water: Miscible in all proportions
Viscosity: No data available.
Boiling point/range°C: 135
Melting point/range°C: -90
Flammability limits %: lower: 1.8
upper: 14
Flash point°C: 42
Part.coeff. n-octanol/water: No data available.
Autoflamability°C: No data available.
Relative density: 0.93
Vapour pressure: 5.1 hPa at 20 °C
Relative density: 0.93
pH: No data available.
VOC g/l: No data available.

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions. Stable at room temperature.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid


10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Copper.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Toxicity values:

<table>
<thead>
<tr>
<th>Route</th>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORAL</td>
<td>RAT</td>
<td>LD50</td>
<td>2125</td>
<td>mg/kg</td>
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Hazardous ingredients:

[cont...]
2-ETHOXYETHANOL

<table>
<thead>
<tr>
<th>Species</th>
<th>Route</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVN</td>
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<td>mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>LD50</td>
<td>5799</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>LD50</td>
<td>7750</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SCU</td>
<td>LD50</td>
<td>3400</td>
<td>mg/kg</td>
</tr>
<tr>
<td>SKN</td>
<td>LD50</td>
<td>3900</td>
<td>mg/kg</td>
</tr>
</tbody>
</table>

FORMAMIDE

<table>
<thead>
<tr>
<th>Species</th>
<th>Route</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORL</td>
<td>LD50</td>
<td>3150</td>
<td>mg/kg</td>
</tr>
<tr>
<td>ORL</td>
<td>LD50</td>
<td>3</td>
<td>gm/kg</td>
</tr>
<tr>
<td>SCU</td>
<td>LD50</td>
<td>&gt;4</td>
<td>gm/kg</td>
</tr>
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</table>

Relevant effects for mixture:

<table>
<thead>
<tr>
<th>Effect</th>
<th>Route</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (harmful)</td>
<td>INH DRM ING</td>
<td>Hazardous: calculated</td>
</tr>
<tr>
<td>Toxicity for reproduction</td>
<td>--</td>
<td>Hazardous: calculated</td>
</tr>
</tbody>
</table>

Symptoms / routes of exposure

- **Skin contact**: There may be irritation and redness at the site of contact.
- **Eye contact**: There may be irritation and redness. The eyes may water profusely.
- **Ingestion**: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur. There may be vomiting.
- **Inhalation**: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

<table>
<thead>
<tr>
<th>Species</th>
<th>Test</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLUEGILL (Lepomis macrochirus)</td>
<td>96H LC50</td>
<td>&gt;10000</td>
<td>mg/l</td>
</tr>
<tr>
<td>DAPHNIA</td>
<td>48H EC50</td>
<td>1,892.52</td>
<td>mg/l</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Persistence and degradability: Biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No bioaccumulation potential.
### Section 12: Mobility in soil

**Mobility:** Readily absorbed into soil.

### Section 12.5: Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

### Section 12.6: Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

### Section 13: Disposal considerations

#### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

### Section 14: Transport information

#### 14.1. UN number

**UN number:** UN1171

#### 14.2. UN proper shipping name

**Shipping name:** ETHYLENE GLYCOL MONOETHYL ETHER

#### 14.3. Transport hazard class(es)

**Transport class:** 3

#### 14.4. Packing group

**Packing group:** III

#### 14.5. Environmental hazards

**Environmentally hazardous:** No  
**Marine pollutant:** No

#### 14.6. Special precautions for user

**Special precautions:** No special precautions.

**Tunnel code:** D/E  
**Transport category:** 3

### Section 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Specific regulations:** This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC.
15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

This safety data sheet is prepared in accordance with Commission Regulation (EC) No 1272/2008.

Phrases used in s.2 and s.3:
- H226: Flammable liquid and vapour.
- H302: Harmful if swallowed.
- H302+312+332: Harmful if swallowed, in contact with skin or if inhaled.
- H312: Harmful in contact with skin.
- H332: Harmful if inhaled.
- H360D: May damage the unborn child.
- H360FD: May damage fertility. May damage the unborn child.
- R10: Flammable.
- R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.
- R60: May impair fertility.
- R61: May cause harm to the unborn child.

Legend to abbreviations:
- PNEC = predicted no effect level
- DNEL = derived no effect level
- LD50 = median lethal dose
- LC50 = median lethal concentration
- EC50 = median effective concentration
- IC50 = median inhibitory concentration
- dw = dry weight
- bw = body weight
- PCP = phycico-chemical properties
- cc = closed cup
- OCC = ocular/corneal
- oc = open cup
- DRM = dermal
- MUS = mouse
- SKN = skin
- GPG = guinea pig
- SCU = subcutaneous
- RBT = rabbit
- IVN = intravenous
- HAM = hamster
- PGN = pigeon
- HMN = human
- MAM = mammal

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.