**SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product Identifier**
TURPENTINE

**1.2 Relevant identified uses of the substance or mixture and uses advised against**
THINNER FOR OIL BASED COLOURS

**1.3 Details of the supplier**
DALER-ROWNEY LTD
PEACOCK LANE
BRACKNELL
RG12 8SS
ENGLAND
Telephone: +44 (0) 1344 461000
E-mail contact: tom.stagles@dale-rowney.com

**1.4 Emergency Telephone**
+44(0)1344 461083  (Monday to Friday 08:00-16:00)

**SECTION 2. HAZARDS IDENTIFICATION**

**2.1 Classification**
(EC) No1272/2008

Flammable liquids (Category 3) Acute toxicity, Inhalation (Category 4)
Acute toxicity, Dermal (Category 4) Acute toxicity, Oral (Category 4)
Aspiration hazard (Category 1) Eye irritation (Category 2)
Skin irritation (Category 2) Skin sensitization (Category 1)
Chronic aquatic toxicity (Category 2)

Flammable. Harmful by inhalation, in contact with skin and if swallowed.
Harmful by inhalation, in contact with skin and if swallowed.
Harmful: may cause lung damage if swallowed. Irritating to eyes and skin.
May cause sensitization by skin contact. Toxic to aquatic organisms,
may cause long-term adverse effects in the aquatic environment

**2.2 Classification**
(CHIP 4)
FLAMMABLE LIQUID
Hazard Symbol(s) Xn, N
R-phrase(s) R10; R20/21/22; R36/38; R43; R51/53; R65

**2.3 Label Elements**

**2.4 Signal Word**
DANGER
Safety Data Sheet  
CLASSIFICATION IN ACCORDANCE WITH CLP/GHS  
TURPENTINE  

Product Name  

2.5 Hazard Statement  

H226 Flammable liquid and vapour.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H411 Toxic to aquatic life with long lasting effects  

2.6 Precautionary Statement  

P101 If medical advice is needed, have product container or label at hand  
P102 Keep out of reach of children  
P280 Wear protective gloves/protective clothing  
P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  

2.7 Supplemental Information  

Not applicable  

2.8 Other hazard Information  

Harmful if swallowed.  

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS  

3.1 Chemical Name  

<table>
<thead>
<tr>
<th>Name</th>
<th>Cas-No</th>
<th>EC No</th>
<th>Index-No</th>
<th>Classification</th>
<th>Conc’n %</th>
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<tr>
<td>Turpentine</td>
<td>8006-64-2</td>
<td>232-350-7</td>
<td>650-002-00-6</td>
<td>GHS02</td>
<td>H226</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>GHS08</td>
<td>H302</td>
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<td>GHS07</td>
<td>H304</td>
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<td></td>
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<td>GHS09</td>
<td>H312</td>
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<td>H315</td>
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<td>H317</td>
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<td></td>
<td></td>
<td></td>
<td>H411</td>
</tr>
</tbody>
</table>

Xn; N; R10; R20/21/22; R36/38; R43; R51/53; R65  

3.2 Further Information  

Key to abbreviation, hazard statements are risk phrases in Section 16  

SECTION 4. FIRST AID MEASURES  

4.1 Description of first aid measures  

Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin contact
Wash off with soap and plenty of water. Consult a physician.

Eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
Irritation to eyes, skin, upper respiratory system; headache, drowsiness, dizziness, nausea, vomiting, visual disturbance

4.3 Indication of immediate medical attention and special treatment needed
If swallowed, obtain immediate medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 General Hazard
THE PRODUCT IS CLASSIFIED AS FLAMABLE LIQUID

5.2 Extinguishing media
For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water

5.3 Extinguishing media not to be used

5.4 Special hazards arising from the substance or mixture
No data available

5.5 Advice for Fire Fighters
Wear self contained breathing apparatus for fire fighting if necessary

5.6 Other information
Use water spray to cool unopened containers

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations

6.4 Reference to other sections
SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end uses
Thinner for oil base colours

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>EC No</th>
<th>Value</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turpentine</td>
<td>8006-64-2</td>
<td>232-350-7</td>
<td>TWA (8 hours)</td>
<td>100 ppm 566 mg/m³</td>
<td>UK. EH40 WEL - Workplace Exposure Limits</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STEL (15 min)</td>
<td>150 ppm 850 mg/m³</td>
<td>UK. EH40 WEL - Workplace Exposure Limits</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Eye / face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Thermal hazards

8.3 Environmental exposure controls
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Pungent</td>
</tr>
</tbody>
</table>
Safety Data Sheet
CLASSIFICATION IN ACCORDANCE WITH CLP/GHS
TURPENTINE

Product Name

pH No data available
Melting point -55 °C
Boiling point 153 - 175 °C
Flash point 36 °C - closed cup
Ignition temperature 233 °C
Lower explosion limit 0.8 %(V)
Upper explosion limit 6 %(V)
Vapour pressure 5 hPa at 20 °C
Density 0.86 kg/l at 23 °C
Water solubility Insoluble
VOC 0.866 kg/l

9.2 Other information
Miscible with organic solvent

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity
May soften oil or acrylic coatings

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Strong oxidizing agents

10.4 Conditions to Avoid
Heat, flames and sparks

10.5 Incompatible materials

10.6 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Acute toxicity
LC50 Inhalation - rat - 6 h - 12,000 mg/m3
Remarks: Behavioral: Convulsions or effect on seizure threshold. Lungs, Thorax, or Respiration: Dyspnea.

11.2 Skin corrosion/irritation
Skin - rabbit - Severe skin irritation - Draize Test

11.3 Serious eye damage/irritation
Causes serious eye irritation

11.4 Respiratory or skin sensitisation
May cause allergic skin reaction

11.5 CMR effects
no data available

11.6 Other information
Harmful if inhaled. Causes respiratory tract irritation. Harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. Harmful if absorbed through skin. Causes skin irritation. Causes serious eye irritation.
SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity  
no data available

12.2 Persistence and degradability  
no data available

12.3 Bioaccumulative potential  
no data available

12.4 Mobility in soil  
no data available

12.5 Results of PBT and vPvB assessment  
no data available

12.6 Other adverse effects  
Toxic to aquatic life.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods  
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

13.2 Contaminated packaging  
Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

ADR/RID  
UN-Number: 1299  
Proper shipping name: TURPENTINE  
Packing group: III

IMDG  
UN-Number: 1299  
Proper shipping name: TURPENTINE  
Packing group: III

Marine pollutant: No

IATA  
UN-Number: 1299  
Proper shipping name: TURPENTINE  
Packing group: III

SECTION 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the product  
Classification, Labelling and packaging Regulation (EC) 1272/2008  
Control of Major Accident Hazards Regulations 1999

15.2 Chemical Safety Assessment  
No Chemical Safety Assessment has been carried out.

SECTION 16. OTHER INFORMATION

16.1 Key to Hazard Statements In Section 3
Safety Data Sheet

CLASSIFICATION IN ACCORDANCE WITH CLP/GHS

TURPENTINE

Product Name

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16.2 Key to Risk Phrases In Section 3

R 10 Flammable
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R36/38 Irritating to the eyes and skin.
R43 May cause sensitisation by skin contact
R51/53 Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.
R65 Harmful: may cause lung damage if swallowed.

This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirement. It should not construed as guaranteeing specific properties.

Data sheet prepared by Daler-Rowney/Technical department Prepared December 2010