1. Identification

Product identifier: SYLVATAL™ D40LR

Other means of identification:
- SDS number: 9150
- Product Code: 200000000772

Recommended use: Industrial uses: Uses of substances as such or in preparations at industrial sites. Formulation [mixing] of preparations and/or re-packaging (excluding alloys).

Recommended restrictions: None known.

Manufacturer/Importer/Supplier/Distributor information:
- Company: Arizona Chemical Company LLC
- Address: Building 100, 4600 Touchton Road East, Suite 1200, Jacksonville, FL
- Zip: 32246
- Country: USA
- Phone Number: 904-928-8700
- Alternate Phone Number: 800-526-5294
- Fax Number: 904-928-8780
- Emergency-US: CHEMTREC 800-424-9300

2. Hazard(s) identification

Physical hazards: Not classified.

Health hazards: Not classified.

OSHA defined hazards: Not classified.

Label elements:
- Hazard symbol: None.
- Signal word: None.
- Hazard statement: The substance does not meet the criteria for classification.

Precautionary statement:
- Prevention: Observe good industrial hygiene practices.
- Response: Wash hands after handling.
- Storage: Store away from incompatible materials.
- Disposal: Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC): After prolonged contact with highly porous materials, this product may spontaneously combust.

Supplemental information: None.

3. Composition/information on ingredients

Substances:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name and synonyms</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil</td>
<td></td>
<td>8002-26-4</td>
<td>100</td>
</tr>
</tbody>
</table>

Material name: SYLVATAL™ D40LR  
Version #: 2.0  
Revision date: 12-04-2016  
Print date: 12-04-2016
### 4. First-aid measures

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>Direct contact with eyes may cause temporary irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most important symptoms/effects, acute and delayed</td>
<td>Indication of immediate medical attention and special treatment needed</td>
</tr>
<tr>
<td>General information</td>
<td>Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.</td>
</tr>
</tbody>
</table>

#### Inhalation
Move to fresh air. Call a physician if symptoms develop or persist.

#### Skin contact
Wash off with soap and water. Get medical attention if irritation develops and persists.

#### Eye contact
Rinse with water. Get medical attention if irritation develops and persists.

#### Indication of immediate medical attention and special treatment needed
Treat symptomatically.

### 5. Fire-fighting measures

| Suitable extinguishing media | Water fog. Water spray, dry chemical, carbon dioxide. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |
| Specific hazards arising from the chemical | Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | Wear suitable protective equipment. Move containers from fire area if you can do so without risk. |
| Specific methods | Use standard firefighting procedures and consider the hazards of other involved materials. |
| General fire hazards | Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. |

### 6. Accidental release measures

| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. |
| | Small Spills: Absorb in vermiculite, dry sand or earth and place into containers. Clean surface thoroughly to remove residual contamination. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |

### 7. Handling and storage

| Precautions for safe handling | Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. May auto-oxidize with sufficient heat generation to ignite if spread (as a thin film) or absorbed on porous or fibrous material. Contaminated rags and cloths must be put in fireproof containers for disposal. Avoid prolonged exposure. Avoid release to the environment. Observe good industrial hygiene practices. Follow all SDS/label precautions even after container is emptied because they may retain product residues. |
| Conditions for safe storage, including any incompatibilities | Do not store in direct sunlight. Store in original tightly closed container. Keep containers closed when not in use. Store at ambient temperature and atmospheric pressure. Store away from incompatible materials (see Section 10 of the SDS). |
8. Exposure controls/personal protection

Occupational exposure limits

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil (CAS 8002-26-4)</td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Oil Mist; Respirable</td>
</tr>
</tbody>
</table>

ACGIH Components

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil (CAS 8002-26-4)</td>
<td>STEL</td>
<td>10 mg/m3</td>
<td>Oil Mist; Respirable</td>
</tr>
<tr>
<td></td>
<td>TWA</td>
<td>5 mg/m3</td>
<td>Oil Mist; Respirable</td>
</tr>
</tbody>
</table>

Biological limit values

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection

Wear appropriate chemical resistant gloves.

Other

Wear suitable protective clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Eye wash fountain and emergency showers are recommended.

9. Physical and chemical properties

Appearance

Liquid.

Physical state

Liquid.

Form

Liquid.

Color

Amber.

Odor

Mild

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

-4.27 °F (-20.15 °C) OECD 102 at 1013 hPa

Initial boiling point and boiling range

681.44 °F (360.8 °C) OECD 103 at 1013 hPa

Flash point

405.0 °F (207.2 °C) Cleveland Open Cup

Evaporation rate

0 (n-BuAc=1) estimated

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)

Not available.

Flammability limit - upper (%)

Not available.

Explosive limit - lower (%)

Not available.

Explosive limit - upper (%)

Not available.
10. Stability and reactivity

Reactivity
The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to avoid
Strong oxidizing agents. Porous material such as rags, paper, insulation, or organic clay may spontaneously combust when wetted with this material. Contact with incompatible materials.

Incompatible materials
Strong oxidizing agents.

Hazardous decomposition products
Upon decomposition this product emits acrid dense smoke with carbon dioxide, carbon monoxide, water and other products of combustion.

11. Toxicological information

Information on likely routes of exposure

Inhalation
Prolonged inhalation may be harmful.

Skin contact
No adverse effects due to skin contact are expected.

Eye contact
Direct contact with eyes may cause temporary irritation.

Distilled Tall Oil
Irritation Corrosion - Eye, No eye irritation.; Data is for similar product.
Result: Negative
Species: New Zealand white rabbit
Organ: Eye
Observation Period: 72 hr
Notes: OECD 405

Ingestion
Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics
Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Acute toxicity
Based on available data, the classification criteria are not met.

Components

<table>
<thead>
<tr>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil (CAS 8002-26-4)</td>
<td></td>
</tr>
</tbody>
</table>
| Acute
  Dermal
    LD50 | Sprague-Dawley rat > 2000 mg/kg, 14 days At this dose no death occurred.; Data is for similar product.; OECD 402 |
  Oral
    LD50 | Charles River rat > 2000 mg/kg, 14 days At this dose no death occurred.; Data is for similar product.; OECD 423 |
<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subacute Oral NOEL</td>
<td>Sprague-Dawley rat</td>
<td>1000 ppm OECD 422</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation**

Prolonged skin contact may cause temporary irritation.

- **Corrosivity**
  - Distilled Tall Oil
  - Irritation Corrosion - Skin, No skin irritation.; Data is for similar product.
  - Result: Negative
  - Species: New Zealand white rabbit
  - Organ: Skin
  - Test Duration: 4 hr
  - Observation Period: 72 hr
  - Notes: OECD 404

- **Serious eye damage/eye irritation**
  - Direct contact with eyes may cause temporary irritation.

  - **Eye Contact**
    - Distilled Tall Oil
    - Irritation Corrosion - Eye, No eye irritation.; Data is for similar product.
    - Result: Negative
    - Species: New Zealand white rabbit
    - Organ: Eye
    - Observation Period: 72 hr
    - Notes: OECD 405

- **Respiratory or skin sensitization**

  - **Respiratory sensitization**
    - Not available.

  - **Skin sensitization**
    - This product is not expected to cause skin sensitization.

  - Distilled Tall Oil
  - Maximisation Assay (Magnusson and Kligman), Not a skin sensitizer.
  - Result: Negative
  - Species: Guinea pig
  - Organ: Skin
  - Notes: OECD 406

- **Germ cell mutagenicity**

  - No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

  - **Mutagenicity**
    - Distilled Tall Oil
    - Germ Cell Mutagenicity: Ames, No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
    - Result: Negative
    - Species: Salmonella typhimurium
    - Notes: OECD 471

    - Germ Cell Mutagenicity: Chromosome Abberation, This material is considered to be non-clastogenic to human lymphocytes in vitro.
    - Result: Negative
    - Species: Hamster
    - Organ: Ovary cells
    - Notes: OECD 473

    - In vitro gene mutation study in mammalian cells, No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.; Data is for similar product.
    - Result: Negative
    - Species: Mouse
    - Notes: OECD 476

**Carcinogenicity**

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Not listed.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens
Not listed.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not available.

12. Ecological information

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil (CAS 8002-26-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL50</td>
<td>Green algae (Desmodesmus subspicatus)</td>
<td>&gt; 2000 mg/l, 72 hr OECD 201</td>
</tr>
<tr>
<td>NOEL</td>
<td>Green algae (Desmodesmus subspicatus)</td>
<td>300 mg/l, 72 hr OECD 201</td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EL50</td>
<td>5000 - 10000 mg/l, 48 hr OECD 202</td>
</tr>
<tr>
<td>NOEL</td>
<td>Daphnia</td>
<td>5000 mg/l, 48 hr OECD 202</td>
</tr>
<tr>
<td>Fish</td>
<td>LL50</td>
<td>&gt; 100 mg/l, 96 hr OECD 203</td>
</tr>
<tr>
<td>NOEL</td>
<td>Fish</td>
<td>100 mg/l, 96 hr OECD 203</td>
</tr>
</tbody>
</table>

* Estimates for product may be based on additional component data not shown.

Persistence and degradability
The product is biodegradable.

Biodegradability
Percent degradation (Aerobic biodegradation)

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distilled Tall Oil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent degradation</td>
<td>73.2 % Manometric respirometry test, OECD 301F</td>
<td></td>
</tr>
<tr>
<td>Result</td>
<td>Readily biodegradable.</td>
<td></td>
</tr>
<tr>
<td>Species</td>
<td>Activated sewage sludge</td>
<td></td>
</tr>
<tr>
<td>Test Duration</td>
<td>28 days</td>
<td></td>
</tr>
</tbody>
</table>

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Other adverse effects
No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions
Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations
Dispose in accordance with all applicable regulations.

Hazardous waste code
The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products
Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.
IMDG
Not regulated as dangerous goods.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not established.

15. Regulatory information

US federal regulations
All components are on the U.S. EPA TSCA Inventory List. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
Not regulated.
CERCLA Hazardous Substance List (40 CFR 302.4)
Not listed.
SARA 304 Emergency release notification
Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance
Not listed.
SARA 311/312 Hazardous chemical
No
SARA 313 (TRI reporting)
Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List
Not regulated.
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)
Not regulated.
Safe Drinking Water Act (SDWA)
Not regulated.

NFPA ratings
Health: 1
Flammability: 1
Instability: 0

16. Other information, including date of preparation or last revision

Issue date 03-06-2015
Revision date 12-04-2016
Version # 2.0
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Other information, including date of preparation or last revision: Disclaimer