1. PRODUCT AND COMPANY IDENTIFICATION

Product Name                                   Dicyclopentadiene, stabilized
Cat No.                                        AC150760000; AC150760010; AC150760025; AC150760050; AC150761000
Synonyms                                       3a,4,7,7a-Tetrahydro-4,7-methanoindene; Cyclopentadiene dimer; DCPD
Recommended Use                                Laboratory chemicals

Company                                        Fisher Scientific
                                                One Reagent Lane
                                                Fair Lawn, NJ 07410
                                                Tel: (201) 796-7100
Entity / Business Name                         Acros Organics
                                                One Reagent Lane
                                                Fair Lawn, NJ 07410

Emergency Telephone Number
For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

2. HAZARDS IDENTIFICATION

DANGER!

Emergency Overview
Flammable liquid and vapor. Harmful by inhalation and if swallowed. Irritating to eyes, respiratory system and skin. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Appearance  Colorless
Physical State  Liquid

odors              strong

Target Organs       Eyes, Skin, Respiratory system

Potential Health Effects

Acute Effects

Principle Routes of Exposure

Eyes
Irritating to eyes.

Skin
Irritating to skin. May be harmful in contact with skin.

Inhalation
Harmful by inhalation. Irritating to respiratory system.

Ingestion
Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects
None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions
No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Haz/Non-haz</th>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dicyclopentadiene</td>
<td>77-73-6</td>
<td>&gt;95</td>
</tr>
<tr>
<td></td>
<td>4-tert-Butyl catechol</td>
<td>98-29-3</td>
<td>0.01-0.02</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

Skin Contact
Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation
Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Immediate medical attention is required.

Ingestion
Do not induce vomiting. Call a physician or Poison Control Center immediately.

Notes to Physician
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flash Point
26°C / 78.8°F

Method
No information available.

Autoignition Temperature
503°C / 937.4°F

Explosion Limits
Upper 6.3 vol %
Lower 0.8 vol %

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media
No information available.

Hazardous Combustion Products
No information available.
Sensitivity to mechanical impact
No information available.

Sensitivity to static discharge
No information available.

Specific Hazards Arising from the Chemical
Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions
Should not be released into the environment.

Methods for Containment and Clean Up
Soak up with inert absorbent material. Keep in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Handling
Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharges.

Storage
Keep containers tightly closed in a dry, cool and well-ventilated place. Flammables area. Keep away from heat and sources of ignition.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Measures
Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>TWA: 5 ppm</td>
<td>(Vacated) TWA: 30 mg/m³</td>
<td>TWA: 30 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Vacated) TWA: 5 ppm</td>
<td>TWA: 5 ppm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>Quebec</th>
<th>Mexico OEL (TWA)</th>
<th>Ontario TWAEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>TWA: 27 mg/m³</td>
<td>TWA: 30 mg/m³</td>
<td>TWA: 27 mg/m³</td>
</tr>
<tr>
<td></td>
<td>TWA: 5 ppm</td>
<td>TWA: 5 ppm</td>
<td>TWA: 5 ppm</td>
</tr>
</tbody>
</table>
NIOSH IDLH: Immediately Dangerous to Life or Health

Personal Protective Equipment

Eye/face Protection
Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection
Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Colorless</td>
</tr>
<tr>
<td>odor</td>
<td>strong</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH</td>
<td>No information available.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>1.8 hPa @ 20 °C</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>4.6 (Air = 1.0)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>170°C / 338°F @ 760 mmHg</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>11 - 13°C / 51.8 - 55.4°F</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>26°C / 78.8°F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.982</td>
</tr>
<tr>
<td>Solubility</td>
<td>No information available.</td>
</tr>
<tr>
<td>log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>132.2</td>
</tr>
<tr>
<td>Molecular Formula</td>
<td>C10 H12</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Conditions to Avoid

Incompatible Materials
Strong oxidizing agents

Hazardous Decomposition Products
Carbon monoxide (CO), Carbon dioxide (CO₂)

Hazardous Polymerization
Hazardous polymerization does not occur.

Hazardous Reactions
None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information
<table>
<thead>
<tr>
<th>Component</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>346.5 mg/kg (Rat)</td>
<td>4380 mg/kg (Rabbit)</td>
<td>500 ppm (Rat) 4h</td>
</tr>
<tr>
<td></td>
<td>2000 mg/kg (Rat)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-tert-Butyl catechol</td>
<td>2820 mg/kg (Rat)</td>
<td>630 µL/kg (Rabbit)</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

**Irritation**
Irritating to eyes, respiratory system and skin

**Toxicologically Synergistic Products**
No information available.

**Chronic Toxicity**

**Carcinogenicity**
There are no known carcinogenic chemicals in this product

**Sensitization**
No information available.

**Mutagenic Effects**
No information available.

**Reproductive Effects**
No information available.

**Developmental Effects**
No information available.

**Teratogenicity**
No information available.

**Other Adverse Effects**
See actual entry in RTECS for complete information.

**Endocrine Disruptor Information**
No information available

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

<table>
<thead>
<tr>
<th>Component</th>
<th>Freshwater Algae</th>
<th>Freshwater Fish</th>
<th>Microtox</th>
<th>Water Flea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>EC50 96 h &gt;100 mg/L</td>
<td>Not listed</td>
<td>Not listed</td>
<td>EC50 48 h 11 mg/L</td>
</tr>
</tbody>
</table>

**Persistence and Degradability**
No information available

**Bioaccumulation/ Accumulation**
No information available

**Mobility**

<table>
<thead>
<tr>
<th>Component</th>
<th>log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>2.89</td>
</tr>
</tbody>
</table>

### 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods**
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
14. TRANSPORT INFORMATION

**DOT**

- **UN-No**: UN1992
- **Proper Shipping Name**: FLAMMABLE LIQUID, TOXIC, N.O.S.
- **Proper technical name**: (DICYCLOPENTADIENE)
- **Hazard Class**: 3
- **Subsidiary Hazard Class**: 6.1
- **Packing Group**: III

**TDG**

- **UN-No**: UN1992
- **Proper Shipping Name**: FLAMMABLE LIQUID, TOXIC, N.O.S.
- **Hazard Class**: 3
- **Subsidiary Hazard Class**: 6.1
- **Packing Group**: III

**IATA**

- **UN-No**: UN2048
- **Proper Shipping Name**: Dicyclopentadiene
- **Hazard Class**: 3
- **Packing Group**: III

**IMDG/IMO**

- **UN-No**: UN2048
- **Proper Shipping Name**: Dicyclopentadiene
- **Hazard Class**: 3
- **Packing Group**: III

15. REGULATORY INFORMATION

**International Inventories**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>NLP</th>
<th>PICCS</th>
<th>ENCS</th>
<th>AICS</th>
<th>CHINA</th>
<th>KECL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>T</td>
<td>X</td>
<td>-</td>
<td>201-052-9</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>KE-34129</td>
</tr>
<tr>
<td>4-tert-Butyl catechol</td>
<td>T</td>
<td>X</td>
<td>-</td>
<td>202-653-9</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>KE-11368</td>
<td></td>
</tr>
</tbody>
</table>

Legend:

- X - Listed
- E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
P - Indicates a commenced PMN substance
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

**TSCA 12(b)**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA 12(b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>Section 4</td>
</tr>
<tr>
<td>4-tert-Butyl catechol</td>
<td>Section 4</td>
</tr>
</tbody>
</table>

**SARA 313**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>77-73-6</td>
<td>&gt;55</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazardous Categorization**

- Acute Health Hazard: Yes
- Chronic Health Hazard: No
- Fire Hazard: Yes
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

Clean Water Act
Not applicable

Clean Air Act
Not applicable

OSHA
Not applicable

CERCLA
Not Applicable

California Proposition 65
This product does not contain any Proposition 65 chemicals.

State Right-to-Know

<table>
<thead>
<tr>
<th>Component</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dicyclopentadiene</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
</tr>
<tr>
<td>4-tert-Butyl catechol</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

U.S. Department of Transportation
Reportable Quantity (RQ): N
DOT Marine Pollutant  N
DOT Severe Marine Pollutant  N

**U.S. Department of Homeland Security**
This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade**
No information available

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**
B2  Flammable liquid
D1B  Toxic materials
D2B  Toxic materials

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### 16. OTHER INFORMATION

**Prepared By**
Regulatory Affairs
Thermo Fisher Scientific
Tel: (412) 490-8929

**Creation Date**
20-May-2010

**Print Date**
20-May-2010

**Revision Summary**
"***", and red text indicates revision

**Disclaimer**
The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS