1. IDENTIFICATION

Product name: 2,3-Benzofuran
Product code: B0060
Product use: For laboratory research purposes.
Restrictions on use: Not for drug or household use.

Company: TCI America
9211 N. Harborgate Street
Portland, OR 97203 U.S.A.
Telephone: +1-800-423-8616 / +1-503-283-1681
Fax: +1-888-520-1075 / +1-503-283-1987
e-mail: sales-US@TCIchemicals.com
www.TCIchemicals.com

Emergency telephone number:
Chemical Emergencies:
TCI America (8:00am - 5:00pm) PST
+1-503-286-7624
Transportation Emergencies:
Chemtrec 24-Hour
+1-800-424-9300 (U.S.A.)
+1-703-527-3887 (International)
Responsible department:
TCI America
Environmental Health Safety and Security
+1- 503-286-7624

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:
WHMIS 2015:
- Carcinogenicity [Category 2]
- Specific Target Organ Toxicity (Repeated Exposure) [Category 2]
- Flammable Liquids [Category 3]
- Aquatic Hazard (Acute) [Category 3]
- Aquatic Hazard (Long-Term) [Category 3]

Signal word: Warning!
Hazard Statement(s):
- Flammable liquid and vapor
- Suspected of causing cancer
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects
- May cause damage to organs through prolonged or repeated exposure: Liver

Pictogram(s) or Symbol(s):

Precautionary Statement(s):
[Prevention]
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Avoid release to the environment. Wear protective gloves, protective clothing, face protection.

[Response]
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. If exposed or concerned: Get medical advice or attention.
Store in a well-ventilated place. Keep cool. Store locked up.

[Storage]
[Disposal]
Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

Hazards not otherwise classified: [HNOC]
May cause polymerization.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/mixture:</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components:</td>
<td>2,3-Benzofuran</td>
</tr>
<tr>
<td>Percent:</td>
<td>&gt;99.0%(GC)</td>
</tr>
<tr>
<td>CAS RN:</td>
<td>271-89-6</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>118.14</td>
</tr>
<tr>
<td>Chemical Formula:</td>
<td>C₈H₆O</td>
</tr>
<tr>
<td>Synonyms:</td>
<td>Coumarone, Cumarone</td>
</tr>
</tbody>
</table>

4. FIRST-AID MEASURES

**Description of first aid measures**

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

**Skin contact:** Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Get medical advice/attention.

**Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Get medical advice/attention. Rinse mouth.

**Ingestion:** Get medical advice/attention. Rinse mouth.

**Symptoms/effects:**

**Acute:** No data available

**Delayed:** Possibly carcinogenic to humans

**Indication of any immediate medical attention:**
Not available.

**Notes to physician:**
No data available

5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media:** Dry chemical, foam, water spray, carbon dioxide.

**Unsuitable extinguishing media:** Solid streams of water

**Specific hazards arising from the chemical:** This substance may polymerize explosively when heated or involved in a fire. Container may explode when heated. Combat fire from a sheltered position.

**Hazardous combustion products:** These products include: Carbon oxides

**Other specific hazards:** Closed containers may explode from heat of a fire.

**Advice for firefighters:** Wear self-contained breathing apparatus if possible.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Use extra personal protective equipment (self-contained breathing apparatus). Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

**Environmental precautions:** Prevent product from entering drains.

**Methods and materials for containment and cleaning up:** Absorb spilled material in dry sand or inert absorbent before recovering it into a covered container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

**Prevention of secondary hazards:** Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

**Precautions for safe handling:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid all contact!

**Conditions for safe storage, including any incompatibilities**

**Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Store locked up. Store away from incompatible materials such as oxidizing agents. Light-sensitive Air-sensitive

**Packaging material:** Comply with laws.
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls: Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment
Respiratory protection: Half or full facepiece respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection: Impervious gloves.
Eye protection: Safety goggles. A face-shield, if the situation requires.
Skin and body protection: Impervious protective clothing. Protective boots, if the situation requires.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Liquid
Form: Clear
Colour: Colorless - Reddish yellow
Odour: Aromatic
Odour threshold: No data available

Solubility(ies):
[Water] Insoluble
[Other solvents] Ether, Alcohols, Benzene

Decomposition temperature: No data available
Relative density: 1.10
Kinematic viscosity: No data available
Log Pow: No data available

Melting point/freezing point: No data available
Boiling point/range: 175°C (347°F)
Decomposition temperature: No data available
Relative density: 1.10
Kinematic viscosity: No data available
Log Pow: No data available

Flash point: 56°C (133°F)
Flammability(solid, gas): No data available

Flammability or explosive limits:
Lower: No data available
Upper: No data available

Reactivity: No data available
Chemical stability: Polymerization may occur under the influences of heat, light or on contact with polymerization initiators such as peroxides etc.
Possibility of hazardous reactions: No special reactivity has been reported.
Conditions to avoid: Heat, Spark, Open flame, Static discharge, Light
Incompatible materials: Oxidizing agents
Hazardous decomposition products: Carbon dioxide, Carbon monoxide
11. TOXICOLOGICAL INFORMATION

RTECS Number: DF6423800

Acute Toxicity:
ipr-mus LD50: 500 mg/kg

Skin corrosion/irritation:
No data available

Serious eye damage/irritation:
No data available

Respiratory or skin sensitization:
No data available

Germ cell mutagenicity:
msc-mus-lym 100 mg/L
sce-ham-ovr 199 mg/L
oms-mus-orl 100 mg/kg

Carcinogenicity:
orl-mus TDLo: 30900 mg/kg/2Y-C
orl-rat TDLo: 61800 mg/kg/2Y-C

IARC: Group 2B (Possibly carcinogenic to humans)
NTP: No data available
OSHA: No data available

Reproductive toxicity:
No data available

Target organ(s):
May cause damage to organs through prolonged or repeated exposure: Liver

12. ECOLOGICAL INFORMATION

Ecotoxicity:
Fish: No data available
Crustacea: No data available
Algae: No data available

Persistence / degradation:
No data available

Bioaccumulative potential (BCF): 360

Mobility in soil
Log Pow: 2.67
Soil adsorption (Koc): 675
Henry's Law (PaM³/mol): 53.2

13. DISPOSAL CONSIDERATIONS

Disposal of product:
Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not be allowed to enter the environment, drains, water ways, or the soil.

Disposal of container:
Dispose of as unused product. Do not re-use empty containers.

Other considerations:
Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION

DOT (US)

| UN number: UN1993 | Proper Shipping Name: Flammable liquids, n.o.s | Class or Division: 3 Flammable liquid | Packing Group: III |
| IATA
| UN1993 | Proper Shipping Name: Flammable liquid, n.o.s | Class or Division: 3 Flammable liquid | Packing Group: III |
| IMDG
| UN number: UN1993 | Proper Shipping Name: Flammable liquid, n.o.s | Class or Division: 3 Flammable liquid | Packing Group: III |

EmS number: F-E, S-E

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):
This product is on the EPA Toxic Substances Control Act (TSCA) inventory.

US Federal Regulations
CERCLA Hazardous substance and Reportable Quantity:
SARA 313: Not Listed
SARA 302: Not Listed

State Regulations
State Right-to-Know
Massachusetts: Not Listed
New Jersey: Not Listed
Pennsylvania: Not Listed
California Proposition 65: Listed

Other Information
NFPA Rating:
Health: 0
Flammability: 2
Instability: 0

HMIS Classification:
Health: 0
Flammability: 2
Physical: 0

International Inventories
Canada: DSL On DSL
EC-No: 205-982-6

16. OTHER INFORMATION

Revision date: 07/06/2018
Revision number: TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.