1. IDENTIFICATION

Product name: 3,5-Dinitrobenzoyl Chloride
Product code: D0825
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:
Acute Toxicity - Oral [Category 4]
Acute Toxicity - Dermal [Category 4]
Acute Toxicity - Inhalation [Category 4]
Eye Damage/Irritation [Category 1]
Germ Cell Mutagenicity [Category 2]
Corrosive to Metals [Category 1]
Skin Corrosion/Irritation [Category 1C]

Signal word: Danger!

Hazard Statement(s):
May be corrosive to metals
Harmful if swallowed, in contact with skin or if inhaled
Causes severe skin burns and eye damage
Suspected of causing genetic defects

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 only in original container. Do not breathe dusts or mists. Use only outdoors or in a well-ventilated area. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

[Response]
If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. If exposed or concerned: Get medical advice or attention. Absorb spillage to prevent material damage.

[Storage]
Store in corrosive resistant bottle or metal container with a resistant inner liner. Store locked up.

[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]
Lachrymator
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance/mixture:</th>
<th>Substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components:</td>
<td>3,5-Dinitrobenzoyl Chloride</td>
</tr>
<tr>
<td>Percent:</td>
<td>&gt;98.0%(GC)(T)</td>
</tr>
<tr>
<td>CAS RN:</td>
<td>99-33-2</td>
</tr>
<tr>
<td>Molecular Weight:</td>
<td>230.56</td>
</tr>
<tr>
<td>Chemical Formula:</td>
<td>C₇H₃ClN₂O₅</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. Immediately call a POISON CENTER or doctor/physician.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Symptoms/effects:


Delayed: May cause heritable genetic damage in humans.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry chemical, carbon dioxide.

Unsuitable extinguishing media: Water

Specific hazards arising from the chemical:

Explosion risk in case of fire. Fight fire remotely due to the risk of explosion. Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.

Hazardous combustion products:

These products include: Carbon oxides Nitrogen oxides Halogenated compounds

Other specific hazards:

WARNING: Highly toxic HCl gas is produced during combustion.

Advice for firefighters:

Wear self-contained breathing apparatus if possible. Combat fire from a sheltered position.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains.

Environmental precautions:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

Methods and materials for containment and cleaning up:

Do not allow contact with water. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

Prevention of secondary hazards:

Avoid all contact! May develop pressure. Open carefully. Use corrosive resistant equipment.

7. HANDLING AND STORAGE

Precautions for safe handling:

Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not to cause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. 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. Avoid shock and friction. Wash hands and face before breaks and immediately after handling the product. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.

Condition for safe storage, including any incompatibilities:

Storage conditions:

Keep container tightly closed. Store in a cool and dark place. Store under inert gas. Protect from moisture. Store locked up. Be sure not to give the container unexpected impacts, such as falling down or falling off. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive

Packaging material:

Comply with laws. Keep only in original container.
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: Dust 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): Solid
Form: Crystal - Small lump
Colour: White - Pale yellow
Odour: No data available
Odor threshold: No data available
Odour threshold: No data available

Melting point/freezing point: 69°C (156°F)
Boiling point/range: 196°C (385°F)
Decomposition temperature: No data available
Relative density: No data available
Kinematic viscosity: No data available
Log Pow: No data available

pH: No data available
Vapour pressure: No data available
Vapour density: 7.6
Dynamic Viscosity: No data available
Evaporation rate (Butyl Acetate=1): No data available

Flash point: No data available
Autoignition temperature: No data available
Flammability (solid, gas): No data available
Flammability or explosive limits: No data available

Solubility(ies):
[Water] No data available
[Other solvents] Benzene, Toluene

10. STABILITY AND REACTIVITY

Reactivity: No data available
Chemical stability: Stable under proper conditions.
Possibility of hazardous reactions: May explosively decompose on heating, shock, friction, etc. Decomposes in contact with water and liberates toxic gases.
Conditions to avoid: Heat, Shock, Friction, Moisture
Incompatible materials: Oxidizing agents
Hazardous decomposition products: Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen chloride
11. TOXICOLOGICAL INFORMATION

RTECS Number: DM6637000

Acute Toxicity:
No data available

Skin corrosion/irritation:
No data available

Serious eye damage/irritation:
No data available

Respiratory or skin sensitization:
No data available

Germ cell mutagenicity:
mm-o-sat 100 ug/plate (+/-S9)

Carcinogenicity:
No data available

12. ECOLOGICAL INFORMATION

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

Persistence / degradability: No data available
Bioaccumulative potential(BCF): No data available
Mobility in soil
Log Pow: No data available
Soil adsorption (Koc): No data available
Henry's Law (PaM^3/mol): No data available

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. Consult an expert of disposal. You may be able to dissolve or mix material with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. 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:** UN3261
- **Proper Shipping Name:** Corrosive solid, acidic, organic, n.o.s
- **Class or Division:** 8 Corrosive material
- **Packing Group:** III

**IATA**
- **UN number:** UN3261
- **Proper Shipping Name:** Corrosive solid, acidic, organic, n.o.s
- **Class or Division:** 8 Corrosive material
- **Packing Group:** III

**IMDG**
- **UN number:** UN3261
- **Proper Shipping Name:** Corrosive solid, acidic, organic, n.o.s
- **Class or Division:** 8 Corrosive material
- **Packing Group:** III

**EmS number:** F-A, S-B

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:** Not Listed

**Other Information**
**NFPA Rating:**
- **Health:** 3
- **Flammability:** 0
- **Instability:** 0

**HMIS Classification:**
- **Health:** 3
- **Flammability:** 0
- **Physical:** 0

**International Inventories**
**Canada:** DSL
**EC-No:** 202-750-6

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.