1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Clonazepam

Product Number : C1277
Brand : Sigma

Company : Sigma-Aldrich
            3050 Spruce Street
            SAINT LOUIS MO  63103
            USA
Telephone : +18003255832
Fax : +18003255052
Emergency Phone #: (314) 776-6555

2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 5-(2-Chlorophenyl)-7-nitro-3H-1,4-benzodiazepin-2(1H)-one

Formula : \( C_{15}H_{10}ClN_{3}O_{3} \)
Molecular Weight : 315.71 g/mol

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<tr>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Concentration</th>
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<td>1622-61-3</td>
<td>216-596-2</td>
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3. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
Target Organ Effect

Target Organs
Central nervous system

HMIS Classification

Health Hazard: 0
Chronic Health Hazard: *
Flammability: 0
Physical hazards: 0

NFPA Rating

Health Hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects
Inhalation  May be harmful if inhaled. May cause respiratory tract irritation.
Skin       May be harmful if absorbed through skin. May cause skin irritation.
Eyes       May cause eye irritation.
Ingestion  May be harmful if swallowed.

4. FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing give artificial respiration

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIRE-FIGHTING MEASURES

Flammable properties
    Flash point no data available
    Ignition temperature no data available

Suitable extinguishing media
    Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for fire-fighters
    Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
    Avoid dust formation.

Environmental precautions
    Do not let product enter drains.

Methods for cleaning up
    Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Handling
    Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage
    Keep container tightly closed in a dry and well-ventilated place.
    Light sensitive.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

**Respiratory protection**
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**
For prolonged or repeated contact use protective gloves.

**Eye protection**
Safety glasses

**Hygiene measures**
General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Form powder

**Safety data**
- pH: no data available
- Melting point: 236.5 - 238.5 °C (457.7 - 461.3 °F)
- Boiling point: no data available
- Flash point: no data available
- Ignition temperature: no data available
- Lower explosion limit: no data available
- Upper explosion limit: no data available
- Water solubility: insoluble

10. STABILITY AND REACTIVITY

**Storage stability**
Stable under recommended storage conditions.

**Conditions to avoid**
Light.

**Materials to avoid**
Strong oxidizing agents

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx), Hydrogen chloride gas

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
LD50 Oral - rat - > 15,000 mg/kg
Irritation and corrosion
no data available

Sensitisation
no data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Developmental Toxicity - mouse - Oral
Specific Developmental Abnormalities: Central nervous system.

Reproductive toxicity - rabbit - Oral
Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).
Effects on Embryo or Fetus: Fetal toxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Reproductive toxicity - rat - Subcutaneous
Effects on Newborn: Biochemical and metabolic.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.
Target Organs Central nervous system,

Additional Information
RTECS: DF2100000

12. ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)
no data available

Ecotoxicity effects
no data available

Further information on ecology
no data available

13. DISPOSAL CONSIDERATIONS
Product
Observe all federal, state, and local environmental regulations.

Contaminated packaging
Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards
Target Organ Effect

DSL Status
All components of this product are on the Canadian DSL list.

SARA 302 Components
SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Chronic Health Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

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New Jersey Right To Know Components

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California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

16. OTHER INFORMATION

Further information
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