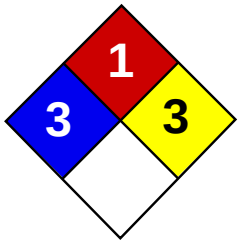
1-9-2024: File reviewed, more currrent SDS/MSDS not available. CAS



Health	3
Fire	3
Reactivity	3
Personal Protection	X

Material Safety Data Sheet
2,4-Dinitrophenol, moist MSDS

Section 1: Chemical Product and Company Identification

Product Name: 2,4-Dinitrophenol, moist

Catalog Codes: SLD3364

CAS#: 51-28-5

RTECS: SL2800000

TSCA: TSCA 8(b) inventory: 2,4-Dinitrophenol, moist

CI#: Not available.

Synonym: 2,4-Dinitrophenol, moist with up to 35% water.

Chemical Name: 2,4-Ditronitrophenol

Chemical Formula: C6-H4-N2-O5

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{2,4-}Dinitrophenol, moist	51-28-5	100

Toxicological Data on Ingredients: 2,4-Dinitrophenol, moist: ORAL (LD50): Acute: 30 mg/kg [Rat]. 45 mg/kg [Mouse]. 30 mg/kg [Rabbit].

Section 3: Hazards Identification

Potential Acute Health Effects:
Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant), of eye contact (irritant). Slightly hazardous in case of skin contact (sensitizer). Severe over-exposure can result in death.

Potential Chronic Health Effects:
CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED]. The substance may be toxic to the reproductive system, heart, cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures

Eye Contact:
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact:
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used.Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation:
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion:
If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: Not available.

Flash Points: Not available.

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2), nitrogen oxides (NO, NO2...).

Fire Hazards in Presence of Various Substances:
Highly flammable in presence of open flames and sparks, of heat. Flammable in presence of reducing materials, of combustible materials.

Explosion Hazards in Presence of Various Substances: Explosive in presence of open flames and sparks, of shocks, of heat, of alkalis.

Fire Fighting Media and Instructions:
Explosive. Flammable solid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion. Use absorbent chemicals or DRY sand. Use flooding quantities of water.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards:
Explosion is caused by heat, friction or shock. Dinitrophenol forms explosive salts with alkali or ammonia and should not be heated with them in closed vessels.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:
Explosive, class 1.4. Flammable solid. Poisonous solid. Stop leak if without risk. Do not touch damaged container or spilled material. Do not clean-up or dispose except under supervision of a specialist. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

Section 7: Handling and Storage

Precautions:
Keep locked up.. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Take precautionary measures against electrostatic discharges. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, reducing agents, combustible materials, alkalis, moisture.

Storage:
Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

Engineering Controls:
Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:
Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Sweet, musty

Taste: Bitter.

Molecular Weight: 184.11 g/mole

Color: Yellowish-brown (yellow to brown)

pH (1% soln/water): Not available.

Boiling Point: Not available.

Melting Point: 113°C (235.4°F)

Critical Temperature: Not available.

Specific Gravity: 1.683 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 6.35 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 1.7

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water.

Solubility: Partially soluble in cold water.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: High temperatures, incompatible materials, light, ignition sources, dehydrating agents.

Incompatibility with various substances:
Highly reactive with reducing agents, combustible materials, alkalis, moisture. Reactive with oxidizing agents.

Corrosivity: Not available.

Special Remarks on Reactivity: Incompatible with acid chlorides, and acid anhydrides. Light sensitive

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 30 mg/kg [Rabbit].

Chronic Effects on Humans:
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Reproductive system/toxin/male [SUSPECTED]. May cause damage to the following organs: the reproductive system, heart, cardiovascular system, central nervous system (CNS).

Other Toxic Effects on Humans:
Very hazardous in case of ingestion, of inhalation. Hazardous in case of skin contact (irritant). Slightly hazardous in case of skin contact (sensitizer).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May affect genetic material and cause adverse reproductive effects based on animal data.

Special Remarks on other Toxic Effects on Humans:
Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: Causes respiratory tract irritation. May cause similar effects to those described for ingestion. Ingestion: May be fatal if swallowed. Causes gastrointestinal (digestive) tract irritation with nausea, vomiting and diarrhea. May affect behavior, central nervous system, cardiovascular system, blood, metabolsim, and sense organs.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification:
CLASS 4.1: Flammable solid. CLASS 6.1: Poisonous material.

Identification: : Dinitrophenol, wetted UNNA: 1320 PG: I

Special Provisions for Transport: Not available.

Section 15: Other Regulatory Information

Federal and State Regulations:
New York release reporting list: 2,4-Dinitrophenol, moist Pennsylvania RTK: 2,4-Dinitrophenol, moist Michigan critical material: 2,4-Dinitrophenol, moist Massachusetts RTK: 2,4-Dinitrophenol, moist New Jersey: 2,4-Dinitrophenol, moist California Director's List of Hazardous Substances: 2,4-Dinitrophenol, moist TSCA 8(b) inventory: 2,4-Dinitrophenol, moist TSCA 8(a) PAIR: 2,4-Dinitrophenol, moist TSCA 8(d) H and S data reporting: 2,4-Dinitrophenol, moist: Effective: 9/30/91; Sunset: 12/19/95 SARA 313 toxic chemical notification and release reporting: 2,4-Dinitrophenol, moist CERCLA: Hazardous substances.: 2,4-Dinitrophenol, moist: 10 lbs. (4.536 kg)

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada):
CLASS B-4: Flammable solid. CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).

DSCL (EEC):
R1- Explosive when dry. R11- Highly flammable. R23/24/25- Toxic by inhalation, in contact with skin and if swallowed. R33- Danger of cumulative effects. S28- After contact with skin, wash immediately with plenty of [***] S37- Wear suitable gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HMIS (U.S.A.):

Health Hazard: 3

Fire Hazard: 3

Reactivity: 3

Personal Protection: x

National Fire Protection Association (U.S.A.):

Health: 3

Flammability: 1

Reactivity: 3

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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Last Updated: 11/01/2010 12:00 PM

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