



SAFETY DATA SHEET

According to JIS Z 7253:2012

Revision Date 28-Jan-2015

Version 1

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name	2,5-Dinitrophenol
Product code	041-25691
CAS No	329-71-5
Formula	(O2N)2C6H3OH
Manufacturer	Wako Pure Chemical Industries, Ltd. 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6201-5964
Supplier	Wako Pure Chemical Industries, Ltd. 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6201-5964
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses and restrictions on use	For research purposes

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Explosives

Self-reactive substances and mixtures

Acute toxicity - Oral

Acute toxicity - Dermal

Acute toxicity - Inhalation (Dusts/Mists)

Skin corrosion/irritation

Serious eye damage/eye irritation

aquatic environment (acute hazard)

aquatic environment (long-term hazard)

Division 1.3
Type D
Category 3
Category 3
Category 3
Category 2
Category 2A
Category 2
Category 2

Pictograms



Signal word

Danger

Hazard statements

H203 - Explosive; fire, blast or projection hazard

H242 - Heating may cause a fire

H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H301 - Toxic if swallowed
 H311 - Toxic in contact with skin
 H331 - Toxic if inhaled
 H401 - Toxic to aquatic life
 H411 - Toxic to aquatic life with long lasting effects

Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Wear protective gloves/protective clothing/eye protection/face protection
- Avoid breathing dust/fume/gas/mist/vapors/spray
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep wetted with water
- Ground/bond container and receiving equipment
- Do not subject to grinding/shock/friction
- Keep/Store away from clothing/combustible materials
- Keep only in original container
- Keep cool

Precautionary statements-(Response)

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water
- Call a POISON CENTER or doctor/physician if you feel unwell.
- Remove/Take off immediately all contaminated clothing
- Wash contaminated clothing before reuse.
- If skin irritation occurs: Get medical advice/attention
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- Call a POISON CENTER or doctor/physician
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth.
- Explosion risk in case of fire
- DO NOT fight fire when fire reaches explosives
- In case of fire: Use CO₂, dry chemical, or foam for extinction
- Evacuate area
- Collect spillage

Precautionary statements-(Storage)

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed
- Store in accordance with local regulations
- Store away from other materials

Precautionary statements-(Disposal)

- Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula (O₂N)₂C₆H₃OH

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS No
2,5-Dinitrophenol	98.0	184.10	(3)-797	N/A	329-71-5

Impurities and/or Additives : Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), carbon dioxide (CO₂), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Special extinguishing method

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up

Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose of contaminated clothing.

Recovery, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling

Technical measures

Avoid contact with strong oxidizing agents. Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Use personal protective equipment as required.

Storage**Safe storage conditions****Storage conditions**

Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Store locked up.

Safe packaging material

Glass

Incompatible substances

Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment**Respiratory protection**

Dust mask

Hand protection

Protection gloves

Eye protection

protective eyeglasses or chemical safety goggles

Skin and body protection

Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form**Color**

yellow

Appearance

crystals - powder

Odor

characteristic odor

pH

No data available

Melting point/freezing point

105-108 °C

Boiling point, initial boiling point and boiling range

No data available

Flash point

No data available

Evaporation rate:

No data available

Flammability (solid, gas):

No data available

Upper/lower flammability or explosive limits**Upper :**

No data available

Lower :

No data available

Vapour pressure

No data available

Vapour density

6.4(air=1)

Specific Gravity (relative density)

No data available

Solubilities

water , Ethanol : slightly soluble . ether : freely soluble .

n-Octanol/water partition coefficient:(log Pow)

No data available

Auto-ignition temperature:

No data available

Decomposition temperature:

No data available

Viscosity (coefficient of viscosity)

No data available

Dynamic viscosity

No data available

Section 10: STABILITY AND REACTIVITY

Stability**Stability**

May be altered by light. Heating may cause an explosion

Reactivity

No data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

Incompatible materials

Strong oxidizing agents

Hazardous decomposition productsCarbon monoxide (CO), carbon dioxide (CO₂), Nitrogen oxides (NO_x)**Section 11: TOXICOLOGICAL INFORMATION****Acute toxicity**

No data available

Skin irritation/corrosion

No data available

Serious eye damage/ irritation

No data available

Respiratory or skin sensitization

No data available

Reproductive cell mutagenicity

No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration hazard

No data available

Section 12: ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
2,5-Dinitrophenol	N/A	LC50: <i>Pimephales promelas</i> 2.99 - 3.78 mg/L 96 h	N/A

Other data

No data available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Hazard to the ozone layer

No information available

Section 13: DISPOSAL CONSIDERATIONS**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN1320
Proper shipping name:	Dinitrophenol, wetted
UN classification	4.1
Subsidiary hazard class	6.1
Packing group	I
ERG Code	3EP
Marine pollutant	Yes

IMDG

UN number	UN1320
Proper shipping name:	Dinitrophenol, wetted
UN classification	4.1
Subsidiary hazard class	6.1 P
Packing group	I
EmS-No	F-B, S-J
Marine pollutant (Sea)	Yes

IATA

UN number	UN1320
Proper shipping name:	Dinitrophenol, wetted
UN classification	4.1
Subsidiary hazard class	6.1
Packing group	I
Environmentally Hazardous Substance	Yes

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Listed
TSCA	-

Japanese regulations

Fire Service Act	Category V, nitro compounds, dangerous grade 2
Poisonous and Deleterious Substances Control Law	Poisonous Substances 2nd. Grade
Industrial Safety and Health Act	Not applicable
Regulations for the carriage and storage of dangerous goods in ship	Flammable Solids - Spontaneously Combustible Solids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	Flammable Solids - Spontaneously Combustible Solids (Ordinance Art.194, MITL Nortification for Air Transportation of Explosives etc , Attached Table 1)
Marine Pollution Prevention Law	
Pollutant Release and Transfer Register Law	Not applicable
Export Trade Control Order	Not applicable

Section 16: OTHER INFORMATION

Literature and references**Disclaimer**

The information provided in 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 guidance for safe handling, and is not to be considered 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 materials or in any process, unless specified in the text.

GHS Classification is according to JIS Z7252(2010). *JIS: Japanese Industrial Standards

End of Safety Data Sheet