



Material Safety Data Sheet

THIS PRODUCT IS A CHEMICAL SUBSTANCE, AND IS INTENDED TO BE USED BY PERSONS HAVING CHEMICAL KNOWLEDGE AND SKILL, AT THEIR OWN DISCRETION AND RISK.

IDENTITY: NBD-F

Section 1. Chemical Identification

Trade Name: NBD-F
Manufacturer: Dojindo Laboratories
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Section 2. Composition/ Information on Ingredients

Chemical Name: 4-Fluoro-7-nitrobenzofurazan
CAS Registry #: 29270-56-2

Section 3. Health Hazard Data

Route(s) of Entry:

Inhalation? Yes; Skin? Yes; Ingestion? Yes

Health Hazards (Acute and Chronic): May be harmful by inhalation, ingestion or skin absorption.

Causes eye and skin irritation. Material is irritating to mucous membranes and upper respiratory tract.

Signs and Symptoms of Exposure: Not available

Medical Conditions Generally Aggravated by Exposure: Not available

Section 4. First Aid Procedure

In case of contact with eyes, immediately flush eyes with copious amounts of water for at least 15 minutes. In case of contact, immediately wash skin with soap and copious amounts of water. Assure adequate flushing of the eyes by separating the eyelids with fingers. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If ingested, wash out mouth with water. Call physician. Discard contaminated clothing and shoes.

Section 5. Fire and Explosion Hazard Data

Flash Point (Method Used): Not available

Flammable Limits: Not available

Extinguishing Media: Carbon dioxide, dry chemical powder, foam and water

Special Fire Fighting Procedures: Wear protective clothing, respirator, chemical safety goggles, rubber boots and heavy rubber gloves.

Unusual Fire and Explosion Hazards: Fire may produce irritating or poisonous gases.

Section 6. Accidental Release Measures

Steps to be Taken in Case Material is Released or Spilled:

Wear self-contained breathing apparatus, rubber boots and heavy rubber gloves. Evacuate the area. Sweep up, place in a bag and hold for waste disposal. Ventilate the area and wash the spill site after material pickup is complete. Avoid raising dust.

Section 7. Handling and Storage

Wear appropriate NIOSH/ MSHA-approved respirator, chemical-safety goggles, chemical-resistant gloves, other protective clothing. Mechanical exhaust required. Use only in a chemical fume hood. Safety shower and eye bath. Face

shield. Do not breathe the dust. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Irritant. Harmful solid. Avoid all contact. Avoid prolonged or repeated exposure.

Other Precautions: Keep tightly closed. Protect from light and moisture.
Store in deep freeze at -20 °C and dry place.

Section 8. Exposure Controls/ Personal Protection

Respiratory Protection (Specify Type): Necessary
Ventilation, Local Exhaust: Chemical fume hood
Mechanical (General): Necessary
Protective Gloves: Chemical-resistant gloves
Eye Protection: Chemical-safety goggles
Other Protective Clothing or Equipment: Necessary
Work/ Hygienic Practices: Wash thoroughly after handling. Access to safety shower and eye-wash required.
Do not permit eating, drinking or smoking near the material.

Section 9. Physical/ Chemical Characteristics

Melting Point: 53-57 °C
Boiling Point: Not available
Specific Gravity (water=1): Not available
Vapor Pressure: Not available
Vapor Density (air=1): Not available
Evaporation Rate (butyl acetate=1): Not available
Solubility in water: Insoluble
Solubility in Ethyl alcohol: Soluble
Appearance and Odor: Pale yellow powder

Section 10. Reactivity Data

Stability: Stable
Conditions to Avoid: Heat, sunlight and high temperature
Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids and strong bases.
Hazardous Decomposition or Byproducts: When decomposed, it may emit toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and hydrogen fluoride.
Hazardous Polymerization: Will not occur

Section 11. Toxicological Information

Acute Effects: Data not available
Chronic Effects: Data not available
Carcinogenicity: Data not available
RTECS #: Not listed

Section 12. Ecological Information

Data not available

Section 13. Disposal Consideration

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an after burner and scrubber.

Section 14. Transport Information

Not regulated

Section 15. Regulatory Information

Not applicable

Section 16. Other Information

THE ABOVE INFORMATION IS BELIEVED TO BE CORRECT BUT DOES NOT PURPORT TO BE ALL-INCLUSIVE AND SHALL BE USED ONLY AS A GUIDE. DOJINDO LABORATORIES SHALL NOT BE HELD LIABLE FOR ANY DAMAGE RESULTING FROM HANDLING OR FROM CONTACT WITH THE ABOVE MATERIAL.

