

GPS Safety Summary 2.4- Di Fluoro Nitrobenzene

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1. General Statement

2,4- Di Fluoro Nitro Benzene is a yellow liquid.it does not mix with water.

2. Chemical identity

Name :2,4- Di Fluoro Nitrobenzene

CAS number(s) :446-35-5 EC number :207-167-0 Molecular formula :C6H3F2NO2

Structure :

3. Uses and Benefits

2,4- Di Fluoro Nitro Benzene is used as an intermediate step in further manufacturing of another substance. This substance is used in the following products such as laboratory chemicals.

4. Physical / chemical properties

Property	Value
Physical state :	Liquid
Colour :	Yellow
Odour :	Odourless
рН:	No data available
Melting point :	9 – 10 °C
Boiling point :	203 °C
Flash point :	91 °C
Density:	1.4571 g/cm3
Solubility in Water:	Partly miscible

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5. Health Effects

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Toxic if swallowed
Irritation / corrosion Skin / eye/ respiratory tract	Causes skin irritation, Causes serious eye irritation.
Respiratory or skin sensitisation	NA
Toxicity after repeated exposure Oral / inhalation / dermal	May cause respiratory irritation.
Genotoxicity / Mutagenicity	NA
Carcinogenicity	NA
Toxicity for reproduction	NA

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	Result
Persistence and degradability	Persistence in Water/Soil and Air is high
Bioaccumulative potential	LOW (LogKOW = 2.2115)

7. Exposure

Human health

2,4- Di Fluoro Nitro Benzene is Toxic if swallowed.Causes skin irritation,Causes serious eye irritation.May cause respiratory irritation.Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compounds. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. The exposure must be kept as minimum as possible by the use of appropriate risk management measures a suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers. Careless handling or accidental spillage of the chemical could result in exposure to potentially hazardous levels of

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chemicals. Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

Environment

Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. Spillage shall be quickly collected in the event of an accidental release. More information about release measures and accidental release measures are available in the extended safety data sheet.

8. Risk Management Recommendations

Human health measures

Organizational	A basic standard of occupational hygiene is recommended. Ensure operatives are well informed of the hazards and trained to minimise exposures. Ensure regular inspection and maintenance of equipment and machines. Handle and store according to the indications of the Safety Data Sheet.		
Protection	Eye protection:	Safety glasses	
	Skin and body protection:	Wear suitable protective clothing	
	Respiratory protection:	In case of insufficient ventilation, wear suitable respiratory equipment.	
Engineering controls	Ensure good ventilation of the work station.		
Environment protective measures			
Avoid release to the env	vironment.		

9. First-aid measures

First-aid measures after inhalation: Remove the person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: 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.

First-aid measures after ingestion :Rinse mouth. Call a physician immediately.

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10. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media: No information available

Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released.

Advice for firefighters

Precautionary measures fire :Combustible.Slight fire hazard when exposed to heat or flame.Heating may cause expansion or decomposition leading to violent rupture of containers.On combustion, may emit toxic fumes of carbon monoxide (CO)

Firefighting instructions :Alert Fire Brigade and tell them location and nature of hazard. Wear full body protective clothing with breathing apparatus. Prevent, by any means available, spillage from entering drains or water course. Use fire fighting procedures suitable for the surrounding area.

11. Accidental release measures

Protective equipment: Protection Wear appropriate protective eyeglasses or chemical safety goggles, protective gloves and clothing to prevent skin exposure.

Environmental precautions: Avoid release to the environment.

For containment: Remove all ignition sources. Clean up all spills immediately. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment.

12. Disposal consideration

Regional legislation (waste): Disposal must be done according to official regulations.

Waste treatment methods: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations: Disposal must be done according to official regulations.

13. Handling and storage

Precautions for safe handling:Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray.Avoid contact with skin and eyes. Wear personal protective equipment.

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Hygiene measures: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

14. Classification and Labeling

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US)

: H301 - Toxic if swallowed H315 - Causes skin irritation H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary statements (GHS US)

: P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 - Wash hands, forearms and face thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 - If swallowed: Immediately call a poison center or doctor.

P302+P352 - If on skin: Wash with plenty of water.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P312 - Call a poison center or doctor if you feel unwell.

P321 - Specific treatment (see supplemental first aid instruction on this label).

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

15. Conclusion

2,4- Di Fluoro Nitro Benzene is a yellow liquid.it does not mix with water. This substance is toxic if swallowed, causes serious eye irritation, causes skin irritation and may cause respiratory irritation. Combustible. Slight fire hazard when exposed to heat or flame. Heating may cause expansion or decomposition leading to violent rupture of containers. On combustion, may emit toxic fumes of carbon monoxide (CO). Care should be taken to avoid releases of these products to sewage, drainage systems and water bodies. The exposure must be kept as minimum as possible by the use of appropriate risk management measures as suitable collective and personal protective equipment, good industrial hygiene practices and risk communication through appropriate training of workers.

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16. Contact Information within company

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This GPS safety summary is intended to give general information about the health, safety and environment and not intended to provide in-depth details. To obtain the most accurate and current information, consult the appropriate Safety Data Sheet (SDS) prior to use of the material named herein.