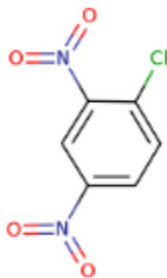


1. General Statements

DNCB residue is a Brown liquid. There may be no odour warning properties, odour is subjective and inadequate to warn of over exposure. Mixture contains one or more component(s) which have the following odour: Almond odour Aromatic odour Characteristic odour. It is acute or chronic health hazards result from the substance. The substance is hazardous to the aquatic environment.

2. Chemical identification.

Name : DNCB residue
CAS number(s) : 97-00-7
EC number : 202-551-4
Molecular formula : C₆H₃ClN₂O₄
Structure :



3. Uses and Benefits

It is used as chemical Intermediate which is widely used in the manufacture of dyes, herbicides, and other agrochemicals. Starting material for producing other nitro-substituted aromatic compounds. Industrial Applications. It is also used intermediate in organic synthesis, including pharmaceuticals and specialty chemicals.

4. Physical / chemical properties

Property	Value
Physical state :	Liquid
Colour :	Brown
Odour :	Almond odour Aromatic odour Characteristic odour
pH :	3.65
Melting point :	NA
Boiling point :	NA
Flash point :	NA
Density :	1.52 g/cm ³ .
Solubility in Water:	NA

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5. Health Effects.

Effect Assessment	Result
Acute toxicity (Oral / inhalation / dermal)	Harmful if swallowed or if inhaled
Irritation / corrosion Skin / eye/ respiratory tract	It may cause skin irritation,
Respiratory or skin sensitisation	Fatal in contact with skin, It may cause an allergic skin reaction
Toxicity after repeated exposure Oral / inhalation / dermal	Causes damage to organs through prolonged or repeated exposure
Genotoxicity / Mutagenicity	NA
Carcinogenicity	Suspected of causing cancer.
Toxicity for reproduction	Suspected of damaging fertility

6. Environmental Effects

Effect Assessment	Result
Aquatic toxicity	No
Fate and behavior	Result
Persistence and degradability	Not rapidly degradable
Bioaccumulative potential	For 1-chloro-2,4-dinitrobenzene (97-00-7) Low potential for bioaccumulation (Log Kow < 4).and 1-chloro-2-nitrobenzene (88-73-3) for Low potential for bioaccumulation (BCF < 500).

7. Exposure

Human health

This substance is harmful if swallowed or inhaled. It may cause skin irritation and is fatal if it comes into contact with the skin. Additionally, it may cause an allergic skin reaction. Prolonged or repeated exposure can cause damage to organs. It is also suspected of causing cancer and may impair fertility. Appropriate precautions should be taken to avoid exposure, including the use of protective equipment and safe handling practices..But the exposure must be kept as minimum as possible by the use of appropriate risk management measures 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 chemicals.Industrial workers should ensure that they follow the advice found in the extended safety data sheet (SDS).

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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 environment		

9. First-aid measures

First-aid measures after inhalation : Remove a person to fresh air and keep them 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. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse eyes with water as a precaution.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

10. Fire-fighting measures

Extinguishing media

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

Unsuitable extinguishing media : Do not use a heavy water stream.

Special hazards arising from the substance or mixture

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

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Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter a fire area without proper protective equipment, including respiratory protection.

11. Accidental release measures

Protective equipment : Protective gloves, Wear recommended personal protective equipment.

Environmental precautions: Avoid release to the environment.

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks without risks if possible.

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 : Obtain special instructions before use. Do not handle it until all safety precautions have been read and understood. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors/dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area.

Hygiene measures: Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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14. Classification and Labeling

Hazard pictograms (GHS US)



Signal word (GHS US)

: Danger

Hazard statements (GHS US)

: H302+H332 - Harmful if swallowed or if inhaled
H310 - Fatal in contact with skin
H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer.
H361 - Suspected of damaging fertility or the unborn child
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust, fume, gas, mist, vapours, spray.
P262 - Do not get in eyes, on skin, or on clothing.
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.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves, protective clothing, eye protection, face protection, and hearing protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P310 - Immediately call a poison center or doctor.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice or attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P333+P313 - If skin irritation or rash occurs: Get medical advice or attention.
P361+P364 - Take off immediately all contaminated clothing and wash it before reuse.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P405 - Store locked up.
P501 - Dispose of contents and/or container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

15. Conclusion

DNCB residue is a brown liquid with characteristic almond and aromatic odours, although odour is unreliable as a warning indicator of overexposure due to its subjective nature. The substance poses both acute and chronic health hazards, including harmful effects if swallowed or inhaled, skin irritation, fatality upon skin contact, and potential to cause allergic skin reactions. Prolonged or repeated exposure may damage organs, and it is suspected to be carcinogenic and harmful to fertility. Environmentally, DNCB residue is hazardous to aquatic life and is not readily degradable, though it has a low potential for bioaccumulation. Strict measures must be taken to minimize exposure and environmental release, including proper protective equipment, engineering controls, and safe handling practices. 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

Manufacturer

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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.