

Spinochem Tech Co.Ltd

Add: No 2278,Zhaochong Rd, Shanghai, China.

Material Safety Data Sheet

Diuron 80% WDG

Section 1 – Chemical product and company identification

PRODUCT NAME:

Diuron 80% WDG

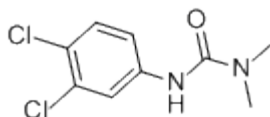
Supplier: SPINOCHEM TECH CO.,LTD

Address: NO.2278,ZHAOCHONG RD,SHANGHAI,CHINA

Section 2 - Composition, Information on Ingredients

Components	CAS Number	(%) Purity
Diuron	330-54-1	80.0
Other ingredients		up to 100

Structural formula:



Molecular formula: C₉H₁₀Cl₂N₂O

Molecular Weight: 233.09

Chemical Abstracts name:

N'-(3,4-dichlorophenyl)-*N,N*-dimethylurea

IUPAC name:

3-(3,4-dichlorophenyl)-1,1-dimethylurea

Section 3 - Hazards Identification

Environmental Hazard: Very toxic to aquatic organisms

Toxicity class: EPA III (formulation).

Eye contact: May cause eye irritation.

Skin contact: Minimally toxic. Causes moderate irritation to skin.

Ingestion: Minimally toxic. Methemoglobinemia may be noted in large ingestions.

Inhalation: May cause irritation to nose and throat.

Section 4 - First Aid Measures

Inhalation: Remove from exposure area to fresh air immediately. If breathing has stopped, perform mechanical artificial respiration. Keep person warm at rest. Treat systematically and supportively. Obtain medical attention if necessary.

Spinochem Tech Co.Ltd

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Skin Contact: Remove contaminated clothing, shoes and leather goods. Gently wipe off excess chemical. Wash skin gently and thoroughly and non-abrasive soap. Seek medical advise if necessary. The product is non considered to be a sensitiser, but persons that become sensitised may require specialised medical management with anti-inflammatory agents.

Eye Contact: Immediately flush the eyes with gently flowing lukewarm water or saline solution for 20 minutes, occasionally lifting the upper and lower lids. Obtain medical attention if necessary.

Ingestion: Remove by gastric lavage and catharsis. Maintain blood pressure and air way. Do not perform gastric lavage if the person is unconscious. Seek medical attention. Administration of gastric lavage or oxygen should be performed by quality medical personnel.

Advise to physician: There is no specific antidote. Gastric lavage and catharsis may be required on consumption of large quantities of the product. Methemoglobinemia may be noted in large ingestions.

Section 5 - Fire Fighting Measures

Fire and explosion hazards: No fire or explosion hazards.

Extinguishing agents: Extinguish small fires with carbon dioxide, dry powder, or alcohol-resistant foam. Water spray can be used for cooling of unaffected stock, but avoid water coming in contact with the product.

Fire-fighting:

Remove container from fire area if possible. Contain fire control for later disposal. Use recommended extinguishing agent for the type of surrounding fire. Avoid inhaling hazardous vapours. Keep material away from water sources and sewers. Do not touch material and avoid breathing fumes. Keep upwind.

Personal protective equipment: Fire may produce irritating or poisoning vapours (corrosive Fumes of chlorides of toxic oxides of nitrogen and carbon) of combustion. Fire fighters and others may be exposed should wear full chemical protective clothing and self-contained breathing apparatus.

Section 6 - Accidental Release Measures

Personal precautions: Avoid contact with skin and eyes. Do not inhale spray particles. For personal protection see Section 8

Environmental precautions: Prevent the product from entering the sewers, waterways and low areas. When the product contaminates public waters, inform appropriate authorities immediately in accordance with local regulations.

Occupational spills:

Small liquid spills of diuron should be reduced to a solid phase by evaporation, or taken up with non-combustible absorbent material (eg. sand), and then placed in a

Spinochem Tech Co.Ltd

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container for later disposal. Large liquid spills on land should be disposed in excavated pits, ponds, or other holding areas, which has been sealed with an impermeable, flexible membrane liner. Solids are then covered with a plastic sheet, while bulk liquids are absorbed with fly ash or cement powder. Spills of diuron into bodies of water are first treated with activated carbon, then the immobilised masses of pollutant and precipitates are moved with mechanical dredges or lifts. Before permanent land disposal of diuron, consult with environmental regulatory agencies.. Keep spectators away and upwind.

Section 7 - Handling and Storage

Handling: Avoid inhalation of spray and fumes and contact with skin and eyes. Use with adequate ventilation. Wash hands before eating, chewing gum, smoking or using the toilet. Remove clothing immediately if the herbicides gets inside. Then wash skin using non-abrasive soap and put on clean clothing. Do not apply directly to areas to surfaces where water is present, or to intertidal areas below the mean high water mark. Water used to clean equipment must be disposed of correctly to avoid contamination.

Storage: stable for up to 2 years when stored under dark warehouse conditions. Store in its original labelled containers in shaded, well ventilated areas, away from heat, sparks or other sources of ignition. Not to be stored next to food stuffs and water supplies. Keep out of reach of children and animals. Local regulations should be complied with.

Section 8 - Exposure Controls, Personal Protection

Occupational exposure limits: NOISH REL TO DUIRON-air: 10H TWA 10 mg/m³.

Engineering control measures: It is essential to provide adequate ventilation. The measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations. If engineering controls and work practises are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

PERSONAL PROTECTIVE EQUIPMENT:

Respirator: An approved full-face respirator suitable for protection from dust and mists is adequate. Limitations of respirator used specified by the approving agency and the manufacturer must be observed.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with the substance.

Gloves: Employee must wear appropriate synthetic protective gloves to prevent contact with substance.

Eye protection: The use of safety goggles is recommended.

Emergency eye wash: Where there is any possibility that an employee's eyes may be

Spinochem Tech Co.Ltd

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exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the intermediate work area for emergency use.

Section 9 - Physical and Chemical Properties

Appearance: off white granule

Explosive properties: Not explosive

Flammability: Not flammable

Flash point: None

Oxidising properties: None

pH: 7.2 (5% solution).

Density: 0.98 g/ml at 20°C

Viscosity: None

Solubility in water: The product disperses in water.

Section 10 - Stability and Reactivity

Stability: Stable for up to 2 years under normal storage conditions.

Incompatibility: Compatible with most other herbicides. However, a compatibility test is required before using with other products. Do not physically mix concentrate directly with other herbicides concentrates; always dilute first. Hydrolysis may occur in the presence of strong acids and alkalis.

Thermal decomposition: Thermal decomposition products may include toxic oxides of nitrogen and carbon and toxic and corrosive fumes of chlorides.

Section 11 - Toxicological Information

Acute oral LD50: 5000 mg/kg in rats

Acute dermal LD50: >2000 mg/kg in rats

Acute inhalation LC50: > 1.07 mg/l of chamber air (4 hours) in rats.

Acute skin irritation: The product is to be non irritant to skin (rabbit).

Acute eye irritation: The product caused mild irritation to eyes (rabbit).

Dermal sensitisation: Product has a weak sensitisation potential (guinea fowl).

Carcinogenicity:

Diuron has been equivocal tumor agent in mice (RTECS). It induces gastric, liver, and pancreatic tumors in rats by oral exposure route. No human information available.

Teratogenicity: Published information: Foetal anomalies after maternal treatment with 250 mg/kg diuron. Most of the anomalies consisted of minor skeletal defects. No human information available.

Mutagenicity: Diuron was mutagenicity the Ames Salmonella microsome assay and cause inhabitation of DNA repair in mice (HSDB). No human information available.

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Section 12 - Ecological Information

Birds : Data as for technical material.

Practically non-toxic to birds.

LC50 (8 d dietary): 1730 mg/kh (bobwhite quail)
>2000 mg/kh (Japanese Quail)
>2000 mg/kh (mallard ducklings)
>2000 mg/kh (pheasant chicks)

Fish : LC50 (96 hours): 10.56 mg.L

Daphnia : Data as for technical material May pose a hazard to Daphnia magna

EC50 (48 hours): 12 m mg/l.

Algae (Scenedesmus subspicatus): ErC50 : 0,796 mg/l EbC50 : 0,077 mg/l

Bees : Non-toxic to bees at 100 µg a.i /bee.

Earthworms : LC50: 58.59 mg/kg silicone. (Eisenia foetida.)

Degradability: In soil, enzymatic and microbial demethylation of the nitrogen atom and hydroxylation is the main degradation pathway. Not very soluble in water and tends to resist leaching. Duration of activity in soil is c. 4-8 months, depending on soil type and humidity : DT50 90-180 days.

Accumulation: The product is unlikely to bio accumulate.

Section 13 - Disposal Considerations

Disposal: Contaminated absorbents, used containers, surplus product, etc., should be buried in approved landfill. Hydrolysis under alkaline conditions is a suitable method to dispose of small quantities of the product. Never pour untreated waste or surplus products into public sewers or where there is any run-off or seepage into water systems. Comply with local legislation apply to waste disposal.

Package product waste: Emptied containers retain vapour and product residues and should be triple rinsed with water. Observe all labelled safeguards until container is cleaned, reconditioned or destroyed. Combustible containers should be disposed of in incinerators. Combustible containers should not be reused, should be punctured and transported to a scrap metal facility to be for recycling and disposal.

Section 14 - Transport Information

UN No.: 3077

ADR/RID:

Shipping name: Environmentally hazardous substance, solid, n.o.s. (Diuron 80%)

Class: 9

Label: 9

Hazard ID no.: 90

Packaging group: III

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Section 15 - Regulatory Information

Symbol: Xn; N

Indication of danger: Harmful; Dangerous to the environment.

Risk phrases:

R 22 Harmful if swallowed

R40 Limited evidence of a carcinogenic effect.

R 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases:

S 2 Keep out of the reach of children.

S 13 Keep away from food, drink and animal feeding stuff.

S 20/21 When using do not eat, drink or smoke.

S 36/37 Wear suitable protective clothing and gloves.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

Section 16 - Additional Information

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.