Material Safety Data Sheet

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience as gained.

Diuron 80% WG

1. Chemical Product / Company Identification

Product Name: Diuron 80% WG

Chemical Name: Diuron; [3-(3,4-dichlorophenyl)-1,1-dimethylurea]

Chemical Family: Substituted Urea Herbicide Usage: Suspension Concentrate Herbicide

Manufacturer: Ningxia Wynca Technology Co., Ltd.

Add.: Taisha Industrial Park, Pingluo, Ningxia, China 753401

Emergency telephone call: 86-0952-3950099

2. Composition/Information on Ingredients

Chemical nature

Water dispersible granule (WG)

Diuron 80% WG

Material w/w (%)
Diuron 80
Various additives 12
Other components Add to 100

3. Hazard identification

Health Hazards: Harmful if swallowed.

Physical Hazards: May release irritating or toxic fumes if burned.

Environmental Hazards: Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes. Do not apply when weather conditions favor drift from areas treated. Cover or incorporate spills.

4. First Aid Measures

Inhalation

Move the patient to fresh air and keep at rest. If symptoms persist, call a physician.

Skin contact

Take off contaminated clothing and shoes immediately. When in contact with the skin, clean with soap and water. If symptoms persist, call a physician.

Eye contact

In case of contact with eyes rinse thoroughly with plenty of water. If symptoms persist, seek medical advice

Ingestion

Do not induce vomiting. Rinse mouth thoroughly with water. Give small amounts of water to drink. Keep body calm, protect against loss of heat. Take medical treatment.

Notes to physician

Symptoms

Local: irritant effects

Systemic: The absorption of this product into the body may lead to the formation of methaemoglobin, in sufficient concentration, causes cyanosis., If large amounts are ingested, the following symptoms may occur:, dizziness, headache

Risks

Danger of formation of methaemoglobin.

Treatment

Local treatment:

Treat symptomatically.

Systemic treatment:

In the event of a mouthful or more being ingested, the following measures should be considered:

Monitoring of cardiac, kidney and red blood cell count.

Observe specific parameters: methaemoglobinemia and serum potassium.

If ingested, irrigate the stomach using activated charcoal in addition.

If methaemoglobin level is less than 20%, administer 100% oxygen. If methaemoglobin

level is greater than 20% treat with 100% oxygen and slowly give 1% Methylene

Blue/Toluidine Blue solution intravenously, 1-2 mg/kg body weight.

Contraindications: alcohol Recovery: Spontaneous.

Oxygen, if needed.

5. Fire Fighting Measures

Suitable extinguishing media

Water spray

Foam

Dry powder

Carbon dioxide (CO₂)

Specific hazards during fire fighting

The product itself does not burn.

In the event of fire the following can be released:

Carbon monoxide (CO)

Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Wear full protective suit.

Further information

Collect contaminated fire extinguishing water separately. This must not be discharged into

drains.

6. Accidental Release Measures

Personal precautions

Use personal protective equipment.

Evacuate personnel to safe areas.

Environmental precautions

Keep people and animals away.

Do not discharge into the drains/surface water/groundwater.

If spillage enters drains leading to sewage works inform local water company immediately.

Methods for cleaning up

Use mechanical handling equipment.

For disposal, pack in tightly closed containers.

Additional advice

Information regarding safe handling, see section 7.

Information regarding personal protective equipment, see section 8.

Information regarding waste disposal, see section 13.

7. Handling and Storage

Handling

Advice on safe handling

Use only in area provided with appropriate exhaust ventilation.

Avoid dust formation.

Advice on protection against fire and explosion

The product neither sensitive to impacts nor to rub effects and therefore not explosive.

Storage

Requirements for storage areas and containers

Keep containers tightly closed in a dry, cool and well-ventilated place.

Further information on storage conditions

Keep away from direct sunlight.

Advice on common storage

Keep away from food, drink and animal feedingstuffs.

Storage stability

Storage period 24 Months

Storage temperature 20 - 30 °C

Suitable materials

Paper sac with a polyethylene lined interior

8. Exposure Controls/Personal Protection

Refer to COSHH assessment (Control of substances Hazardous to Health Regulations 1999 as amended). Engineering controls should be used in preference to personal protective equipment wherever practicable.

Engineering measures

See chapter 7; no measures exceeding those mentioned are necessary.

Personal protective equipment

Respiratory protection Short term: filter apparatus, Filter P3

Hand protection PVC disposable gloves

nitrile rubber

Eye protection Safety glasses / face shield

Skin and body protection Light protective clothing, thick material

Hygiene measures

When using, do not eat, drink or smoke.

Wash hands before breaks and at the end of workday.

Protective measures

Avoid contact with skin and eyes.

Do not breathe dust.

9. Physical and Chemical Properties

Physical State Solid, Water dispersible granule

Colour Gray to White

Odour Faint

pH 7.0-9.0 at 1% w/w in water

Solubility in Water Insoluble, but forms a flowable suspension

Pour density: 0.651 g/cm³

Tap density: 0.708 g/cm³

Explosive Properities None **Oxidising Properities** None

10. Stability and Reactivity

Density (g/cm³)

Conditions to avoid: None in particular

Materials to avoid: None under normal conditions of use

Stability: Stable at ambient conditions

11. Toxicological Information

Oral toxicity: LD50>5000mg/Kg (rat).

Dermal LD50>2000 mg/Kg (rat)

toxicity:

Inhalation LC50>6.875 mg/L (rat).

toxicity:

Skin irritation: Non-irritation(rabbit).Eye irritation: Non-eye irritation (rabbit).Skin Non-sensitizer(guinea pig).

sensitization:

Carcinogenicity Data given in this section are for the active ingredient. Classified by EEC

as a category 3 carcinogen:-substances which cause concern for man owing to possible carcinogenic effects but in respect of which the information is not adequate for making a satisfactory assessment.

Genotoxicity Data given in this section are for the active ingredient. Classified by EEC

as a category 3 mutagen:-substances which cause concern for man owing to possible mutagenic effects but where the available information.

12. Ecological Information

Mobility Kd=8.3,Koc=813,slightly mobile. **Persistence/Degradability** Soil DT₅₀=75.5 days (typical).

Bio-accumulation Non-bio-accumulation

Aquatic Toxicity Fish: $LC_{50} = 6.7 \text{ mg/L}(\text{ Cyprinodon variegatus});$

Daphnia magna: $EC_{50} = 5.7 \text{ mg/L}$;

Algae:ErC₅₀=0.019mg/L(Scenedesmus subspicatus)

Other Toxicity Birds: LD50 (14 d) = 1104 mg/kg bw(Colinus

virginianus);

Bees: Acute contact LD_{50} (48 hours) > 100µg/bee,Acute

oral LD_{50} (48 hours) > $100\mu g/bee$ Earthworms: $LC_{50}(14d)$ > 798 mg/kg.

13. Disposal Considerations

Do not contaminate water, food or feed by disposal.

PESTICIDE DISPOSAL: Do not contaminate water, food, or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Do not reuse container. Completely empty bag into application equipment. Then dispose of empty bag in a sanitary landfill, or incineration; if allowed by State and local authorities, by burning. If burned, stay out of smoke.

14. Transportation Information

ADR/RID/ADNR

UN-No 3077
Labels 9
UN Packaging group III

ADR/RID-Description 3077, Environmentally hazardous substance,

solid, n.o.s (contains diuron 80.0%), 9,12(c),

ADR

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (DIURON)

IMDG-Proper Shipping Name Not dangerous for transport.

IMDG-Ems NumberNone.IMDG-MFAG Shipping NameNone.ICAO-Proper Shipping NameAs for UN.

15. Regulation Information

Risk symbol Irritant **Hazard Classification** Xi-Irritant

Designated Name Diuron 80% WG (contains diuron 80.0%)

R phrases 36/38-Irritating to eyes and skin

S phrases 22-Do not breath dust. 26-In case of contact

with eyes, rinse immediately with plenty of water and seek medical advice. 36/37-Wear suitable protective clothing and gloves. 45-In case of accident or if you feel unwell, seek medical advice immediately (show the label

where possible).

Control of Pesticides Regulations 1986: WHEN USING DO NOT EAT, DRINK OR

SMOKE

Precautions WASH CONCENTRATE from skin or eyes

immediately.

WASH HANDS AND EXPOSED SKIN

before meals and after work.

DO NOT BREATHE SPRAY

KEEP OUT OF REACH OF CHILDREN HARMFUL TO FISH OR OTHER

AQUATIC LIFE.

Do not contaminate surface waters or ditches

with chemical or used container.

KEEP IN ORIGINAL CONTAINER, tightly

closed in a safe place.

EMPTY CONTAINER COMPLETELY

AND dispose of safely.

16. Other Information

Additional information

This data in this Material Safety Data Sheet only to the specific material designated and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS: Zhejiang Xinan Chemical Industrial Group Co., Ltd.

Add: Xinanjiang, Jiande, Zhejiang, 311600, China.