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# SECTION 1. Identification of the substance/mixture and of the company/undertaking

: Diurex 80 WG

21 Viben Street Brackenfell 7560

: msds@mcw.co.il

: +27 82 331 6463

: Herbicide

	+27 21 982 1460
SECTION 2. Hazards identification	
Human health hazards	: Harmful if swallowed. Limited evidence of a carcinogenic effect. Harmful : danger of serious damage to health by prolonged exposure if swallowed.
Environmental hazard	: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

: Diuron: 3-(3,4-Dichlorophenyl)-1,1-dimethylurea

: ADAMA SOUTH AFRICA (PTY) LTD

# **SECTION 3.** Composition/information on ingredients

Substance name		Concentration % w/w	CAS No	EC No	Index No	REACH Reg.	Classification
Diuron (ISO)	:	78 - 82 %	330-54-1	206-354-4	006-015-00-9		Carc. Cat. 3; R40 Xn; R22-48/22 N; R50-53 (M fact. = 100)

# SECTION 4. First aid measures

First aid measures	
Inhalation	: Remove victim to fresh air. If breathing is difficult: artificial respiration . Get medical attention.
Skin contact	: Remove contaminated clothing and shoes. Wash away remainder with plenty of water.
Eye contact	: Wash out with plenty of water with the eyelid held wide open for at least 15 minutes. Get medical attention.
Ingestion	: Wash out mouth with plenty of water. Never give anything by mouth to an unconscious person. Get medical attention.
Note to physician	: No specific antidote known. Treat symptomatically and give supportive therapy.
Protection of first-aiders	: Use appropriate protection (see section 8).

# **SECTION 5.** Fire-fighting measures

Trade name

Email

Phone nr

Substance name Relevant identified uses

**Company identification** 

Suitable extinguishing media	: For small fire : dry chemical powder , water spray carbon dioxide For large fire : foam , water fog , water spray.
Protection against fire	: Self-contained breathing apparatus and total protection required in enclosed areas.
Hazardous decomposition products	: Chloride compounds , nitrogen oxides (NO, NO2) , carbon oxides (CO, CO2) .

#### **SECTION 6.** Accidental release measures

For emergency responders Environmental precautions	<ul><li>Wear suitable protective clothing, gloves and eye/face protection.</li><li>Do not empty into drains Do not discharge into the environment.</li></ul>
Clean up methods	: Absorb in sand or other inert material. Collect spills and put it into appropriated container. Dispose of this material and its container at hazardous or special waste collection point. Keep away from combustible material.

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SECTION 7. Handling and stora	age	

	Handling	: Ventilation required.
	Storage	: Keep in original containers. Keep away from food, drink and animal feeding stuffs. Store in dry, well-ventilated area.
	Precautions in handling and storage	: Handle in accordance with good industrial hygiene and safety procedures.
	Storage - away from	: Direct sunlight.
SECT	TION 8. Exposure controls/perso	onal protection
	TLV©	: Diuron: 10 mg/m3
		: Ventilation required.
		: Wash hands thoroughly after handling. When using do not eat, drink or smoke. Wash clothing before re-using.
	Personal protection	
	Respiratory protection	: No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.
	Hand protection	: Wear suitable gloves.
	Skin protection	: Wear suitable protective clothing Wear safety boots.
	Eye protection	: Chemical goggles or safety glasses.

# **SECTION 9.** Physical and chemical properties

Physical state at 20 °C	: Granular solid.
Colour	: White -off white
Odour	: Faint odour
Melting point [°C]	: 158-159 (Diuron)
Flammability	: Not flammable
Vapour pressure [mPa]	: 0.01@ 25℃ (Diuron)
Bulk density [g/cc]	: 0.6-0.64
Solubility in water	: Miscible
Log P octanol / water at 20°C	: 2.8 (Diuron)
Explosive Properties	: Not explosive
Oxidising properties	: Not oxidizing

# **SECTION 10. Stability and reactivity**

Stability	: Stable under normal conditions.
Hazardous decomposition products	: Chloride compounds , nitrogen oxides (NO, NO2) , carbon oxides (CO, CO2) .
Materials to avoid	: oxidizing agents , acids , alkali .

# **SECTION 11. Toxicological information**

#### On product

- Rat oral LD50 [mg/kg]	: >2,000
- Dermal, Rat LD50 [mg/kg]	: > 2,000
- Rat inhalation LC50 [mg/l/4h]	: >2.03 Maximum concentration attainable
Dermal irritation (rabbit)	: Mildly irritating
Eyes irritation (rabbit)	: Not irritant
Sensitization	: Non sensitizer

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# SECTION 11. Toxicological information (continued)

Mutagenicity	: (Diuron): Not mutagenic
Carcinogenicity	: (Diuron): EPA Group C: Possible human carcinogen. : EU: Carc.Cat. 3
Toxic for reproduction : Fertility	: (Diuron): No adverse health effects were noted.
Toxic for reproduction	: (Diuron): Not teratogenic in animal experiments (Low doses)

# **SECTION 12.** Ecological information

96 H-LC50 - Rainbow trout [mg/l]	: 5.6
48 H-EC50 - Daphnia magna [mg/l]	: 4.8
72 H-EC50 - Algae [mg/l]	: 0.025
LD50 Birds [mg/kg]	: Japanese quail =431.78
Bees LD50 [µg]	: Not toxic to bees
Persistence - degradability	Diuron: Soil :
	: The product is persistent Half-life time (t1/2) 90-180 days.
Mobility	Diuron: Soil :
	: Low mobility Adsorbed on organic matter and clay. Low risk of underground water contamination.
Bioaccumulative potential	: Low bioaccumulation potential (Log Pow=2.8).

# **SECTION 13.** Disposal considerations

#### General

: Dispose of in a pesticide approved landfill, or in a chemical incinerator equipped with scrubbers. Dispose in a safe manner in accordance with local/national regulations.

### **SECTION 14.** Transport information

UN N°	: 3077
Proper shipping name	: Environmentally hazardous substances, solid, N.O.S. (Diuron).
- H.I. no	: 90
Land transport (ADR-RID)	
ADR - Special provision	: Class 9, M7, PG III
Sea transport (IMDG) [English only]	
- IMO-IMDG code	: Class 9, PG III
- Emergency Schedule (EmS) - Fire	: F-A, S-F
- IMDG-Marine pollution	: Yes
Air transport (ICAO-IATA) [English only]	
- IATA - class or division	: 9, PG III
International transport regulations	
National transport regulations	: No additional national regulations are available/required

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# **SECTION 15.** Regulatory information

EU Classification Symbol(s)	: According to Commision Directive 67/548/EEC, 1999/45/EC and its amendments
R Phrase(s)	<ul> <li>Xn: Xn : Harmful.</li> <li>N: N : Dangerous for the environment.</li> <li>R22 - Harmful if swallowed.</li> <li>R40 - Limited evidence of a carcinogenic effect.</li> <li>R48/22 - Harmful : danger of serious damage to health by prolonged exposure if swallowed.</li> <li>R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</li> </ul>
S Phrase(s)	<ul> <li>S02 - Keep out of the reach of children.</li> <li>S13 - Keep away from food, drink and animal feedingstuffs.</li> <li>S20 - When using do not eat or drink.</li> <li>S29/35 - Do not empty into drains ; dispose of this material and its container in a safe way.</li> <li>S36/37 - Wear suitable protective clothing and gloves.</li> <li>S46 - If swallowed seek medical advice immediately and show this container or label.</li> <li>S57 - Use appropriate container to avoid environmental contamination.</li> <li>S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.</li> </ul>
SECTION 16. Other information	
List of relevant R phrases (heading 3)	<ul> <li>R22 - Harmful if swallowed.</li> <li>R40 - Limited evidence of a carcinogenic effect.</li> <li>R48/22 - Harmful : danger of serious damage to health by prolonged exposure if swallowed.</li> <li>R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic</li> </ul>

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environment.

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