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		Supersedes : 3 / 6 / 2013
<b>BOBCAT COMBI 600 WG</b>		<b>H-0132</b>

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

**Trade name** : BOBCAT COMBI 600 WG  
**Substance name** : Diuron: 3-(3,4-dichlorophenyl)-1,1-dimethylurea  
Hexazinone: 3-cyclohexyl-6-dimethylamino-1-methyl-1,3,5-triazine-2,4-(1H,3H)-dione  
**Relevant identified uses** : Herbicide  
**Company identification** : ADAMA SOUTH AFRICA (PTY) LTD  
21 Viben Street  
Brackenfell 7560  
**Email** : msds@mcw.co.il  
**Emergency phone nr** : +27 82 331 6463  
+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.

### SECTION 3. Composition/information on ingredients

Substance name	Concentration % w/w	CAS No	EC No	Index No	REACH Reg.	Classification
Diuron (ISO)	44 - 49 %	330-54-1	206-354-4	006-015-00-9	----	Carc. Cat. 3; R40 Xn: R22-48/22 N; R50-53 (M fact. = 100)
Hexazinone	12 - 14 %	51235-04-2	257-074-4	613-132-00-4	----	Xn: R22 Xi; R36 N; R50-53

### 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

**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** : Nitrogen oxide , chloride compounds , carbon oxides (CO, CO2) .

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## SECTION 6. Accidental release measures

- For emergency responders** : Wear suitable protective clothing, gloves and eye/face protection.
- Environmental precautions** : Do not empty into drains Do not discharge into the environment.
- Clean up methods** : Collect spills and put it into appropriated container. Dispose of this material and its container at hazardous or special waste collection point.

## SECTION 7. Handling and storage

- 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 .

## SECTION 8. Exposure controls/personal protection

- TLV<sup>©</sup>** : (Diuron): 10 mg/m<sup>3</sup>  
Hexazinone: Data not available.  
: Ventilation required.
- : Wash hands thoroughly after handling. When using do not eat, drink or smoke. Wash clothing before re-using.
- Personal protection**
- **Respiratory protection** : Dust mask .
  - **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** : Light brown
- Odour** : characteristic
- Melting point [°C]** : 158-159 (Diuron)  
115-117 (Hexazinone)
- Flammability** : Not flammable
- Vapour pressure [mPa]** : 0.001 @ 25°C (Diuron)  
0.03 (extrapolated) (25 °C) ; 8.5 mPa (86 °C) (Hexazinone)
- Density [g/cm<sup>3</sup>]** : 0.9308 g/cm<sup>3</sup>
- Solubility in water** : Dispersible
- Log P octanol / water at 20°C** : 2.8 (Diuron)  
1.2 (pH 7) (Hexazinone)
- Explosive Properties** : Not explosive
- Oxidising properties** : Not oxidizing

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## SECTION 10. Stability and reactivity

- Stability** : Stable under normal conditions.  
**Hazardous decomposition products** : Nitrogen oxide , chloride compounds , 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] : >5.31
- Dermal irritation (rabbit)** : Not irritant
- Eyes irritation (rabbit)** : Minimal irritant
- Sensitization** : Non sensitizer
- Mutagenicity** : Not mutagenic
- Carcinogenicity** : **Diuron:**
  - : EU: R40 - Limited evidence of a carcinogenic effect.: **Hexazinone:**
  - : EU : Not classified
- Toxic for reproduction : Fertility** : Not considered to be toxic for the reproductive system.
- Toxic for reproduction** : Not teratogenic in animal experiments

## SECTION 12. Ecological information

### On product

- LC50 96 Hour - fish [mg/l]** : 66.70 (Danio rerio)
- 48 H-EC50 - Daphnia magna [mg/l]** : 53.64
- 72 H-EC50 - Algae [mg/l]** : 0.0168
- LD50 Birds [mg/kg]** : Japanese quail >2,000
- Bees LD50 [µg]** : Not toxic to bees
- Persistence - degradability** : **Diuron: Soil**
  - : The product is persistent .
  - Half-life time (t1/2) 90-180 days.: **Hexazinone: Soil :**
  - : Moderately persistent in soil
  - Half-life time (t1/2) : 90 days
- Mobility** : **Diuron: Soil :**
  - : Low mobility .
  - Adsorbed on organic matter and clay.

## 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.

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#### SECTION 14. Transport information

**UN N°** : 3077  
**Proper shipping name** : UN3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.(Diuron, Hexazinone), 9, III  
- H.I. no : 90  
- IMO-IMDG - class or division : 9  
- Packing group : III  
- IMDG-Marine pollution : Marine pollutant - Polluant marin

#### SECTION 15. Regulatory information

##### EU Classification

**Symbol(s)** : Xn: Xn : Harmful.  
N: N : Dangerous for the environment.



**R Phrase(s)** : R22- Harmful if swallowed.  
R40 - Limited evidence of a carcinogenic effect.  
R48/22- 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.

**S Phrase(s)** : S2- Keep out of the reach of children.  
S13- Keep away from food, drink and animal feedingstuffs.  
S22- Do not breathe dust.  
S29/35- Do not empty into drains; dispose of this material and its container in a safe way.  
S37- Wear suitable gloves.  
S46- If swallowed, seek medical advice immediately and show this container or label.  
S57- Use appropriate containment to avoid environmental contamination.  
S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

#### SECTION 16. Other information

**List of relevant R phrases (heading 3)** : R22 - Harmful if swallowed.  
R36 - Irritating to eyes.  
R40 - Limited evidence of a carcinogenic effect.  
R48/22 - 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.

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