



# SAFETY DATA SHEET

## Diuron/Glyphosate/Oxyfluorfen 644 SC

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AG-DGO2-644-SC

### Product identifier

## Diuron/Glyphosate/Oxyfluorfen 644 SC

Synonyms AG-DGO2-644-SC

Pure substance/mixture Mixture

### Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Herbicide  
Uses advised against No information available

### Details of the supplier of the safety data sheet

Supplier Address ADAMA Agan Ltd  
P.O.B. 262  
ASHDOD Israel

For further information, please contact

Email address SDS@ADAMA.COM

### Emergency Telephone

Emergency Telephone +972-03-6106666 Subscription no. 36789 (ADAMA Makhteshim Ltd.)

## Section 2: HAZARD IDENTIFICATION

### Classification of the substance or mixture

Acute toxicity - Oral	Category 4 - (H302)
Skin corrosion/irritation	Category 3 - (H316)
Serious eye damage/eye irritation	Category 1 - (H318)
Carcinogenicity	Category 2 - (H351)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

### Label Elements

#### Hazard pictograms

**Signal word**

Danger

**Hazard Statements**

H302 - Harmful if swallowed  
 H316 - Causes mild skin irritation  
 H318 - Causes serious eye damage  
 H351 - Suspected of causing cancer  
 H373 - May cause damage to organs through prolonged or repeated exposure  
 H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements**

P102 - Keep out of reach of children  
 P201 - Obtain special instructions before use  
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray  
 P270 - Do not eat, drink or smoke when using this product  
 P280 - Wear protective gloves/protective clothing/eye protection/face protection  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
 P501 - Dispose of contents/ container to an approved waste disposal plant

**Other Hazards**

No information available

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

Chemical Name	Weight-%	CAS No
Diuron	24-27	330-54-1
Glyphosate	12-16	1071-83-6
Oxyfluorfen	10-13	42874-03-3
Ethoxylated butanol, phosphate ester	<2	50769-39-6
Ethoxylated alcohols phosphate ether	<2	68130-47-2
Isopropylamine	5-8	75-31-0

### Section 4: FIRST AID MEASURES

**First aid measures****General advice**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection!.

**Inhalation**

Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

**Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required.

**Eye contact**

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

**Ingestion** Call a physician or poison control center immediately. Rinse mouth. Drink plenty of water.

**Self-protection of the first aider** Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** None known

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

## Section 5: FIRE-FIGHTING MEASURES

**Extinguishing media**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

No information available.

**Special hazards arising from the substance or mixture**

No specific hazard known.

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary

## Section 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

**For emergency responders**

Use personal protection recommended in Section 8.

**Environmental precautions**

Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for cleaning up**

Take up mechanically, placing in appropriate containers for disposal.

**Reference to other sections**

**Other Information**

See also section 8,13

## Section 7: HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**

Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Use with local exhaust ventilation.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

**Conditions for safe storage, including any incompatibilities****Storage Conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

**Specific end use(s)****Risk Management Methods (RMM)**

The information required is contained in this Material Safety Data Sheet.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****National occupational exposure limits**

Chemical Name	European Union	United Kingdom	France	Spain	Germany
Diuron 330-54-1		STEL: 30 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	
Isopropylamine 75-31-0			TWA: 5 ppm TWA: 12 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 24 mg/m <sup>3</sup> TWA: 5 ppm TWA: 12 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> Ceiling / Peak: 10 ppm Ceiling / Peak: 24 mg/m <sup>3</sup>
Chemical Name	Italy	Portugal	Netherlands	Finland	Denmark
Diuron 330-54-1		TWA: 10 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Isopropylamine 75-31-0		STEL: 10 ppm TWA: 5 ppm		STEL: 5 ppm STEL: 12 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup>
Chemical Name	Austria	Switzerland	Poland	Norway	Ireland
Diuron 330-54-1	STEL 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Glyphosate 1071-83-6			TWA: 10 mg/m <sup>3</sup>		
Isopropylamine 75-31-0	STEL 20 ppm STEL 48 mg/m <sup>3</sup> TWA: 5 ppm TWA: 12 mg/m <sup>3</sup>	STEL: 10 ppm STEL: 24 mg/m <sup>3</sup> TWA: 5 ppm TWA: 12 mg/m <sup>3</sup>	STEL: 24 mg/m <sup>3</sup> TWA: 12 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> STEL: 10 ppm STEL: 18 mg/m <sup>3</sup>	TWA: 5 ppm TWA: 12 mg/m <sup>3</sup> STEL: 10 ppm STEL: 24 mg/m <sup>3</sup>

**Derived No Effect Level (DNEL)** No information available

**Predicted No Effect Concentration (PNEC)** No information available.

**Exposure controls**

**Engineering Controls** Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment****Eye/face protection**

Tight sealing safety goggles.

**Body Protection**

Suitable protective clothing, Apron, Gloves made of plastic or rubber.

**General Hygiene Considerations** When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended.

**Environmental exposure controls** Do not allow into any sewer, on the ground or into any body of water.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### Physical and Chemical Properties

<u>Property</u>	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
<b>Appearance</b>			
Physical state	: Liquid		
Color	: white or light yellow		
Odor	: No information available		
Odor threshold	: No data available		
pH	: 4.6 - 5.2		
Melting point/freezing point °C	: ----		Not Applicable
Boiling point/boiling range °C	: No data available		
Flash point °C	: > 100		
Evaporation rate	: Not Applicable		
Flammability (solid, gas)	: Not applicable for liquids		
Upper/lower flammability or explosive limits	: No data available		
Vapor pressure kPa	: ----		Not Applicable
Vapor density	: No data available		
Relative density	: 1.2 - 1.3		
Solubility(ies) mg/l	: ----		Not Applicable
Partition Coefficient (n-octanol/water) Log Pow	:		See Section 12 for more information
Autoignition temperature °C	: No data available		
Decomposition temperature °C	: No data available		
Kinematic viscosity mm <sup>2</sup> /s 40 °C	: 1440		
Explosive properties	: No data available		
Oxidizing properties	: No data available		
<b>Other Information</b>			
Bulk density g/ml	: ----		Not Applicable
Surface tension mN/m	: ----		No data available

## Section 10: STABILITY AND REACTIVITY

### Reactivity

Not available.

### Chemical stability

Stable under normal conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to avoid

Heat, flames and sparks.

### Incompatible Materials

No information available

### Hazardous Decomposition Products

None under normal use conditions.

## Section 11: TOXICOLOGY INFORMATION

### Information on toxicological effects

#### Acute toxicity

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
Oral LD50 mg/kg	:			No data available
Dermal LD50 mg/kg	:			No data available
Inhalation LC50 mg/l/4h	:			No data available
Skin corrosion/irritation	:			No data available
Serious eye damage/eye irritation	:			No data available
Respiratory/skin sensitization	:			No data available

#### Chronic toxicity

#### Germ cell mutagenicity

##### Chemical Name

Diuron	:	Not classified
Glyphosate	:	Not classified
Oxyfluorfen	:	Not classified

#### Carcinogenicity

##### Chemical Name

Diuron	:	Suspected of causing cancer
Glyphosate	:	Not Carcinogenic
Oxyfluorfen	:	Not Carcinogenic

#### Reproductive toxicity

##### Chemical Name

Diuron	:	Not toxic for the reproductive system
Glyphosate	:	Not toxic for the reproductive system
Oxyfluorfen	:	Not toxic for the reproductive system

#### STOT - single exposure

##### Chemical Name

Diuron	:	No data available
Glyphosate	:	No data available
Oxyfluorfen	:	No data available

#### STOT - repeated exposure

##### Chemical Name

Diuron	:	May cause damage to organs through prolonged or repeated exposure
Glyphosate	:	No data available
Oxyfluorfen	:	No data available

#### Aspiration hazard

##### Chemical Name

Diuron	:	No data available
Glyphosate	:	No data available
Oxyfluorfen	:	No data available

## Section 12: ECOLOGICAL INFORMATION

### Toxicity

**Aquatic toxicity**

	<u>Values</u>	<u>Species</u>	<u>Method</u>	<u>Remarks</u>
<b>Acute toxicity</b>				
Fish 96-hour LC50 mg/l	:			No data available
Crustacea 48-hour EC50 mg/l	:			No data available
Algae 72-hour EC50 mg/l	:			No data available
Other plants EC50 mg/l	:			No data available

**Terrestrial Toxicity****Birds Oral LD50 mg/kg****Chemical Name**

Diuron	:	1104	Bobwhite quail
Glyphosate	:	> 2000	
Oxyfluorfen	:	> 947	Bobwhite quail

**Bees Oral LD50 µg/bee****Chemical Name**

Diuron	:	145	contact, mg/kg
Glyphosate	:	100	
Oxyfluorfen	:	> 100	

**Persistence and degradability****Abiotic Degradation****Water DT50 days****Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Diuron	:	----	No data available
Glyphosate	:	1 - 4	
Oxyfluorfen	:	----	Stable

**Soil DT50 days****Chemical Name**

Diuron	:	90-180	
Glyphosate	:	4 - 180	20 °C
Oxyfluorfen	:	68 - 533	

**Biodegradation****Chemical Name**

Diuron	:	No data available
Glyphosate	:	Not readily biodegradable
Oxyfluorfen	:	No data available

**Bioaccumulative potential****Partition Coefficient  
(n-octanol/water) Log Pow****Chemical Name**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>
Diuron	:	2.85	25 °C
Glyphosate	:	-3.2	pH 5-9, 25 ° C
Oxyfluorfen	:	4.86	EEC A.6

**Bioconcentration factor (BCF)****Chemical Name**

Diuron	:		No data available
Glyphosate	:	< 1	
Oxyfluorfen	:		No data available

**Mobility in soil****Adsorption/Desorption**

	<u>Values</u>	<u>Method</u>	<u>Remarks</u>

**Chemical Name**

Diuron	: 400	Koc
Glyphosate	: 24000	Koc
Oxyfluorfen	: 7565	Koc

**Results of PBT and vPvB assessment**

The components in this formulation do not meet the criteria for classification as PBT or vPvB

**Other adverse effects**

No information available.

**Section 13: DISPOSAL CONSIDERATIONS****Waste treatment methods**

<b>Waste from residues/unused products</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated packaging</b>	Improper disposal or reuse of this container may be dangerous and illegal.
<b>Other Information</b>	Waste codes should be assigned by the user based on the application for which the product was used.

**Section 14: TRANSPORTATION INFORMATION****IMDG/IMO**

<b>UN/ID No</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Diuron, Oxyfluorfen, Glyphosate )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Marine pollutant</b>	Yes
<b>Special precautions for user</b>	

**RID/ADR**

<b>UN/ID No</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Diuron, Oxyfluorfen, Glyphosate )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Environmental hazard</b>	Yes
<b>Special precautions for user</b>	

**ICAO/IATA**

<b>UN/ID No</b>	3082
<b>Proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( Diuron, Oxyfluorfen, Glyphosate )
<b>Hazard Class</b>	9
<b>Packing Group</b>	III
<b>Environmental hazard</b>	Yes
<b>Special precautions for user</b>	
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not Applicable





## Section 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

## Section 16: OTHER INFORMATION

### Revision Note

\*\*\* - Change from previous version.

### Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet