



# Material Safety Data Sheet

According to EC Directive 2001/58/EC

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## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Identification of the substance or preparation

MSDS Ref. No.: 2030.02.01  
Product name: Universol Violet  
Synonyms: Universol 9+9+27+3MgO

### Use of the Substance/Preparation

Recommended use: Water soluble fertilizer.

### Company/Undertaking Identification

- Scotts International BV  
Nijverheidsweg 1-5  
6422 PD Heerlen (NL)  
Tel: ++31 (0) 45-5609100  
Fax: ++31 (0) 45-5609190

Emergency telephone number: 

- +44 (0)208 762 8322

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical nature of the preparation

Components	CAS-No	Weight %	EC-No.	Classification
Potassium nitrate, KNO <sub>3</sub>	7757-79-1	> 25%	231-818-8	O;R08
Sodium molybdate, Na <sub>2</sub> MoO <sub>4</sub> +2H <sub>2</sub> O	7631-95-0	< 1%	231-298-2	NE

*For the full text of the R phrases mentioned in this Section, see Section 16*

## 3. HAZARDS IDENTIFICATION

### Classification

The product is classified and labelled in accordance with Directive 1999/45/EC  
O - Oxidizing

### Most important hazards

Contact with combustible material may cause fire.

## 4. FIRST AID MEASURES

<b>General advice:</b>	Check the victim's state of consciousness, breathing and pulse; put in emergency position or revive.
<b>Ingestion:</b>	Possible symptoms are nausea and/or vomiting. Clean mouth with water and drink afterwards plenty of water. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
<b>Inhalation:</b>	Possible symptoms are coughing and/or dyspnoea. If not breathing, give artificial respiration. If symptoms persist, call a physician.
<b>Skin contact:</b>	If skin irritation persists, call a physician.
<b>Eye contact:</b>	Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.
<b>Protection of first-aiders:</b>	Low hazard for usual industrial or commercial handling.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Coordinate fire extinguishing measures to fire in surrounding area.
<b>Unsuitable extinguishing media:</b>	Not applicable
<b>Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases:</b>	Not combustible. Danger of toxic gases in smoke in case of fire.
<b>Special protective equipment for firefighters:</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
<b>Specific methods:</b>	Dike and collect water used to fight fire

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions:</b>	Sweep-up to prevent slipping hazard. Use personal protective equipment.
<b>Environmental precautions:</b>	Prevent product from entering drains. Do not contaminate surface water.
<b>Methods for cleaning up:</b>	Sweep up and shovel.

## 7. HANDLING AND STORAGE

<b>Handling:</b>	
<b>Technical measures/precautions:</b>	Provide appropriate exhaust ventilation at places where dust is formed.

<b>Safe handling advice:</b>	Avoid dust formation. Avoid contact with skin and eyes.
<b><u>Storage:</u></b>	
<b>Technical measures/storage conditions:</b>	Keep containers dry and tightly closed to avoid moisture absorption and contamination. Keep away from food, drink and animal feeding stuffs. For quality reasons: Keep out of reach of direct sunlight, store under dry conditions, partly used bags should be closed well. Keep at temperatures between 0 °C and 40 °C .
<b>Incompatible products:</b>	Keep away from: Flammable materials
<b>Specific use(s):</b>	Water soluble fertilizer.
<b>Packaging material: VCI (Germany)</b>	Plastic bags 5.1B

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Engineering measures to reduce exposure:</b>	Ensure adequate ventilation.
<b><u>Occupational exposure controls</u></b>	
<b><u>Personal protective equipment</u></b>	
<b>Respiratory protection:</b>	In case of insufficient ventilation wear suitable respiratory equipment.
<b>Hand protection:</b>	Pvc disposable gloves.
<b>Eye/face protection:</b>	Safety glasses.
<b>Skin and body protection:</b>	Wear suitable protective clothing.
<b>Hygiene measures</b>	Follow good housekeeping practices. When using, do not eat, drink or smoke. Keep away from food, drink and animal feeding stuffs.
<b><u>Exposure limit values</u></b>	
<b><u>Environmental exposure controls</u></b>	Prevent product from entering drains.

### *Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>·2H<sub>2</sub>O*

<b>Austria - MAKs</b>	15 mg/m <sup>3</sup> MAK
	5 mg/m <sup>3</sup> MAK
<b>Belgium - 8 Hr VLE</b>	5 mg/m <sup>3</sup> VLE
<b>Czech Republic OEL</b>	Listed
<b>Finland - Occupational Exposure Limits - 8 hour</b>	6 mg/m <sup>3</sup>
<b>France - Valeurs Limites d'exposition (VLE)</b>	5 mg/m <sup>3</sup>
<b>France INRS (VME)</b>	5 mg/m <sup>3</sup> VME
<b>Netherlands - OEL - MACs:</b>	5 mg/m <sup>3</sup> MAC
<b>Norway - 8 h:</b>	5 mg/m <sup>3</sup> TWA
<b>Portugal - TWAs</b>	0.5 mg/m <sup>3</sup> TWA
	10 mg/m <sup>3</sup> TWA
	3 mg/m <sup>3</sup> TWA
<b>Spain - Valores Limite Ambientales - VLE</b>	5 mg/m <sup>3</sup> VLA-ED
<b>Sweden - OEL - 8 Hour</b>	10 mg/m <sup>3</sup> LLV
	5 mg/m <sup>3</sup> LLV

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

**Physical State:** Solid  
**Appearance:** Powder  
**Color:** Violet, Off-white  
**Odor:** No information available

### Important Health Safety and Environmental Information

**Solubility:** Completely soluble in water

### Other information

**Bulk density:** 800 - 1200 kg/m<sup>3</sup>

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under recommended storage conditions.  
**Conditions to avoid:** No special storage conditions required.  
**Materials to avoid:** Combustible material.  
**Hazardous decomposition products:** No decomposition if stored normally  
Thermal decomposition can lead to release of irritating gases and vapours

## 11. TOXICOLOGICAL INFORMATION

### Component information

*Potassium nitrate, KNO<sub>3</sub>*  
**LD50/oral/rat =** 3750mg/kg

*Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>·2H<sub>2</sub>O*  
**LD50/oral/rat =** 4000 mg/kg

### Product information

#### Local effects

**Skin effects:** May cause skin irritation in susceptible persons  
**Eye effects:** May cause eye irritation with susceptible persons  
**Inhalation:** May cause sensitization by inhalation  
**Ingestion:** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

## 12. ECOLOGICAL INFORMATION

### Product information

**Water Endangering Class (WGK):** 1 (Scotts classification )

### Component information

*Sodium molybdate, Na<sub>2</sub>MoO<sub>4</sub>+2H<sub>2</sub>O*

### **Ecotoxicity effects**

LC50/96h/rainbow trout => 2800 g/l

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods:** Use up product completely. Packaging material is industrial waste

**Contaminated packaging:** Empty containers can be landfilled, when in compliance with the local regulations

## 14. TRANSPORT INFORMATION

### Product information

**Physical State:** Solid

### ADR/RID

**UN-No:** 1479  
**Proper shipping name:** Oxidizing solid, N.O.S..  
**Hazard Class:** 5.1  
**Packing group:** PG III  
**Description:** Potassiumnitrate

### IATA

**UN-No:** N.A.

### IMO / IMDG

**UN-No:** 1479  
**Proper shipping name:** Oxidizing solid, N.O.S..  
**Hazard Class:** 5.1  
**Packing group:** PG III  
**Description:** Potassiumnitrate



## 15. REGULATORY INFORMATION

### **Indication of danger:**

O - Oxidizing.



### **R -phrase(s)**

R 8 - Contact with combustible material may cause fire.

### **S -phrase(s)**

S17 - Keep away from combustible material.

**ICPE (FR):** Classified installation : article 1230, 1200

## 16. OTHER INFORMATION

### **Text of R Phrases mentioned in Section 2**

R 8 - Contact with combustible material may cause fire.

R36/37/38 - Irritating to eyes, respiratory system and skin.

### **Reason for revision:**

\*\*\* Indicates changes since the last revision. This version replaces all previous versions

### **Prepared by:**

Regulatory Affairs Department.

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**End of Safety Data Sheet**