

According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

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

1.1 Product Identifier Gro-Sure Rose and Shrub 6 months Plant Food

**1.2 Relevant identified uses of the mixture** Fertiliser/ Plant nutrient

**1.3 Supplier** Westland Horticulture Ltd

14 Granville Industrial Estate

Granville Road Dungannon County Tyrone BT70 1NJ

**Email** customerservice@WestlandHorticulture.com

**1.4 Emergency Telephone number** 01480 443789 (UK) 24 hrs

### 2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture According to Regulation (EC) No 1272/2008:

Not classified

## 2.2 Label Elements According to Regulation (EC) No 1272/2008:

Hazard Pictograms None

Signal Word None

Hazard Statements Not applicable

Precautionary Statements Not applicable

Other hazards Product forms slippery surface when combined with water



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: N/A

#### 3.2 Mixtures

Hazardous components/components having designated Workplace Exposure Limits:

Ingredient	Identifiers	Concentration %W/W	Warning Symbols	Directive 67/548/EEC	Regulation (EC) No 1272/2008 (CLP)
Potassium Nitrate	CAS: 7757-79-1 EC: 231-818-8	0 – 35%		O; R8	Ox. Sol. 3, H272
Ammonium Nitrate	CAS: 6484-52-2 EC: 229-347-8	7.5 – 10 %	<b>(1)</b>	O; R8 Xi; R36	Ox. Sol. 3, H272 Eye Dam/Irrit. 2, H319
Mono ammonium Phosphate	CAS: 7722-76-1 EC: 231-764-5	0 - 7.5%		Not classified	Not classified
Calcium Fluoride	CAS: 7789-75-5 EC: 232-188-7	1 – 1.5 %		Not classified	Not classified

See Section 16 for the full text of the H statements declared above

#### 4. FIRST AID MEASURES

## 4.1 Description of first aid measures

General Information: Have the product container, label or Material Safety Data Sheet with you when

calling a poison control center or physician, or going for treatment.

**Inhalation:** Move person to fresh air.

Keep patient warm and at rest.

**Skin Contact:** Wash off with soap and plenty of water.

Get medical advice if irritation develops

**Eye Contact:** Rinse with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses and continue flushing.

Get medical attention if irritation occurs



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

**Ingestion:** Rinse out mouth with water

If material has been swallowed and the expose person is conscious, give small quantities

of water to drink

Get medical advice if person feels sick

### 4.2 Most important symptoms and effects, both acute and delayed

None

### 4.3 Indication of any immediate medical attention and special treatment needed

No specific treatment, treat symptomatically

#### 5. FIRE FIGHTING MEASURES

### **5.1 Extinguishing Media:**

Use flooding quantities of water

### **Unsuitable Extinguishing Media:**

Do not use chemical extinguisher or foam

Do not attempt to smother the fire with steam or sand

### 5.2 Special Hazards Arising From the Substance or Mixture:

The product itself is not combustible but it can support combustion, even in absence of air.

On heating it melts and further heating can cause decomposition, releasing toxic fumes containing nitrogen oxides, sulfur oxides, phosphorous oxides, halogenated compounds, metal oxides and ammonia

Exposure to decomposition products may be a hazard to health. Symptoms may be delayed following exposure

## 5.3 Advice for Fire Fighters:

Wear full protective clothing and self-contained breathing apparatus.

### **Additional Information:**

Use water spray for cooling endangered receptacles and diluting toxic gases

Do not allow molten material or run-off from fire fighting to enter drains or water courses.

If fire run-off water enters drains or water course, inform the appropriate water authorities immediately



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

#### 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Avoid formation / breathing of dust. Ensure adequate ventilation Avoid contact with skin and eyes

### **6.2 Environmental Precautions:**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers

## 6.3 Methods and Materials for Containment and Cleaning Up:

Vacuum or sweep up material.

Place into suitable labelled containers for disposal according to local / national regulations

#### 6.4 Reference to other sections:

See Section 8 for information on personal protection equipment See Section 13 for disposal information

**Additional Advice:** If large quantities of the product contaminates water courses or drains (including via contaminated soil & vegetation), inform respective authorities.

#### 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

#### **Protective measures:**

#### Handling:

- Prevent dust formation and inhalation
- Avoid contact with eyes and skin
- Do not eat, drink or smoke when using this product
- Take off contaminated clothing and wash before reuse
- Avoid unnecessary exposure to atmosphere to prevent moisture pick up
- Wash hands forearms and face and observe good hygiene practice after handling this product

# 7.2 Conditions for safe storage, including any incompatibilities

- Keep containers closed tightly in a dry, cool and well-ventilated place.
- Keep product in original labelled containers
- Storage areas should be appropriately sited to prevent environmental contamination
- Keep away from organic materials, oil and grease, food and drink
- Protect from direct sun light



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

# 7.3 Specific End Uses:

Use as fertiliser according to the instruction on the label

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### **8.1 Control Parameters**

## 8.1.1 Occupational exposure limits:

Ingredients with limit values that require monitoring at the workplace:

Limit value type (country of origin)	Substance name	EC- No.	CAS- No.	Occupational exposure limit value		Monitoring And observation processes	Peak limitation	Source
				Long term	Short term			
OEL (EU)	Calcium Fluoride (CaF <sub>2</sub> )	232- 188-7	7789 -75-5	2.5 mg/m³ (Calculated as F)				

## 8.1.2 Biological limit values: N/A

## 8.1.3 Exposure limits at intended use:

## 8.1.4 DNEL/PNEC-values:

**DNEL Worker:** Potassium Nitrate

DNEL type	Value	Remark
Acute – dermal, local effects	20mg/kg/day	-
Long-term – dermal, local effects	-	-
Long-term – dermal, systemic effects	-	-
Acute – inhalation, local effects	36.7mg/m³	-
Acute – inhalation, systemic effects	-	-
Long-term – inhalation, local effects	-	-
Long-term – inhalation, systemic effects	-	-



# According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

## **DNEL Consumer:** Potassium Nitrate

DNEL type	Value	Remark
Long-term – oral, systemic effects	12.5mg/kg	-
	bw/day	
Acute – dermal, local effects	12.5mg/kg/day	-
Long-term – dermal, local effects	-	-
Long-term – dermal, systemic effects	-	-
Acute – inhalation, local effects	10.9mg/m³	-
Acute – inhalation, systemic effects	-	-
Long-term – inhalation, local effects	-	-
Long-term – inhalation, systemic effects	-	-

**DNEL Worker:** Monoammonium Phosphate

DNEL type	Value	Remark
Long-term – oral, systemic effects	-	-
Acute – dermal, local effects	34.7mg/kg/day	-
Long-term – dermal, local effects	-	-
Long-term – dermal, systemic effects	-	-
Acute – inhalation, local effects	6.1mg/m³	-
Acute – inhalation, systemic effects	-	-
Long-term – inhalation, local effects	2.1mg/kg bw/day	-
Long-term – inhalation, systemic effects	-	-

## **DNEL Consumer:** Monoammonium Phosphate

DNEL type	Value	Remark
Long-term – oral, systemic effects	2.1mg/kg	-
	bw/day	
Acute – dermal, local effects	20.8mg/kg	-
	bw/day	
Long-term – dermal, local effects	-	-
Long-term – dermal, systemic effects	-	-
Acute – inhalation, local effects	1.8mg/m³	-
Acute – inhalation, systemic effects	-	-
Long-term – inhalation, local effects	-	-
Long-term – inhalation, systemic effects	-	-



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

#### **PNEC**

PNEC type	Value	Remark
PNEC aquatic, freshwater	N/A	
PNEC aquatic, marine water	N/A	
PNEC aquatic, intermittent release	N/A	
PNEC sediment, freshwater	N/A	
PNEC sediment, marine water	N/A	
PNEC soil	N/A	
PNEC sewage treatment plant	N/A	
PNEC air	N/A	
PNEC secondary poisoning	N/A	

## **8.2 Exposure Controls**

## 8.2.1 Appropriate engineering controls:

No special ventilation requirements.

Avoid high dust concentration and provide ventilation where necessary

### 8.2.2 Personal protective equipment:

**Respiratory Protection:** Not necessary if room is well ventilated

Use suitable particulate filter respirator if dust concentration is high or if a risk

assessment indicates this is necessary

Hand Protection: Wear chemical resistant gloves (rubber or neoprene) when handling the product

over long periods or if a risk assessment indicates this is necessary

**Eye Protection:** Wear eye protection when a risk assessment indicates this is necessary to avoid

exposure to dust

Skin and Body Protection: Protective work clothing

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

ppearance: solid blue and orange prills



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

Physical state: solid prills

Colour: mix of blue and orange

Odour: odourless
Odour threshold: none

### 9.2 Other information:

	Value	Concentration	Method	Temperature	Pressure	Remark
pН						
Melting	>210°C					
point/freezing point						
Initial boiling						
point/boiling range						
Flash point						
Evaporation rate						
Flammability (solid,						
gas)						
Upper/lower						
flammability or						
explosive limits						
Upper explosive						
limits						
Lower explosive						
limits						
Vapour pressure						
Vapour density						
Relative density	0.9-					
	1.2g/ml					
Solubility(ies)						
Partition coefficient:						
n-octanol/water						
Auto-ignition						
temperature						
Decompositiont						
emperature						
Viscosity						
Viscosity, dynamic						
Viscosity, cinematic						
Explosive						
properties						
Oxidising properties						

Physical hazards: None



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

# Flammable aerosols

## Justification for data waiving:

# **Safety characteristics:**

	Value	Result	Method	Remark
Content of flammable components				
Chemical heat of combustion				
Ignition distance				Testing is not required for
Time equivalent				foam aerosols.
Deflagration density				
Maximum flame height				Testing is not required for
-				spray aerosols.
Flame duration				

Assessment / Classification: N/A

# Flammable solids

## Justification for data waiving:

Safety characteristics:

•	Value	Method	Remark
Burning rate	N/A		
Burning rate with wetted zone			
Moisture content			

Assessment / Classification: N/A

## **Oxidising solids**

# Justification for data waiving:

## Safety characteristics:

	Value	Method	Remark
Preliminary test	N/A		
Mean burning time of test mixture			
Mean burning time of reference			
mixture			

Assessment / Classification: N/A



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

#### 10. STABILITY AND REACTIVITY

10.1 Reactivity: Stable under normal conditions of storage, handling and use

**10.2 Chemical Stability:** Stable under normal conditions of storage, handling and use

10.3 Hazardous Reactions: Hazardous reactions will not occur under normal transport or storage conditions

10.4 Conditions to Avoid: Avoid contamination by any source including metal, dust and organic materials

10.5 Incompatible Materials: Alkalis, combustible materials, reducing materials, organic materials, strong

acids and powdered metals

10.6 Hazardous Decomposition: Heating or fire can release toxic and corrosive vapours and fumes such as

nitrogen and potassium oxides

Reacts with some strong acids to form toxic and corrosive vapours and fumes

### 11. TOXICOLOGICAL INFORMATION

**SECTION 11: Toxicological Information** 

Toxicokinetics, metabolism and distribution

11.1 Information on toxicological effects

Animal data: Ammonium Nitrate: LD50 Median lethal dose rat, 2950 mg/kg

Calcium Fluoride: LD50 Median lethal dose rat, 2000 mg/kg Potassium Nitrate: LD50 Median lethal dose rat, >2000 mg/kg

Monoammonium Phosphate: LD50 Median lethal dose rat, ± 5750 mg/kg

Urea: LD50 Median lethal dose rat, ± 8471 mg/kg

Assessment / Classification: Based on available data, the classification criteria are not met.

**Acute Inhalation Toxicity:** 

Animal Data Calcium fluoride: LC50 Median lethal concentration rat, 5.07 mg/l, 4h

Potassium Nitrate: LC50 Median lethal concentration rat, >0.527 mg/l, 4h



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

Skin corrosion/irritation:

Animal Data Ammonium Nitrate: LD50 Median lethal dose rat, >5,000 mg/kg

Potassium Nitrate: LD50 Median lethal dose rat, >5,000 mg/kg bw

Monoammonium Phosphate: LD50 Median lethal dose rabbit, >7940 mg/kg

Urea: LD50 Median lethal dose rabbit, >21000 mg/kg

**Skin Irritation:** Slightly irritating to the skin after continuous/repeated exposure

**Eye Irritation:** Irritation of the eye tissue after continuous/repeated exposure

Respiratory or Skin Sensitization: No known significant effects or critical hazards

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

No known significant mutagenic, carcinogenic, teratogenic or reproductive toxicity effects or critical hazards

Other information: No known significant effects or critical hazards

#### 12. ECOLOGICAL INFORMATION

12.1 Toxicity: No known significant effects or critical hazards based on ingredients

**Aquatic Toxicity:** Ammonium Nitrate: LC50, 447 mg/l, fresh water, 48h

Potassium Nitrate: LC50, >1000 mg/l, salt water

Monoammonium Phoshate, >85.9 mg/l

Toxicity To Aquatic Invertebrates: Ammonium Nitrate: EC50 Daphnia, 490 mg/l, fresh water, 48h

Calcium Fluoride: EC50 water flea, 26 mg/l, fresh water, 96h EC50 water flea, 10.5 mg/l, marine water, 96h

Toxicity To Aquatic Plants: Ammonium Nitrate: EC50 algae, 1700 mg/l, 10d

Potassium Nitrate: EC50 algae, >1700 mg/l, salt water, 10d Monoammonium Phospahte: EC50 algae, >100mg/l, 72h Calcium Fluoride: EC50 algae, 43 mg/l, fresh water, 96h EC50 algae, 81 mg/l, marine water, 96h

Sediment toxicity: N/A

Terrestrial toxicity:N/A

Toxicity to soil macro-organisms except arthropods: N/A



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

Toxicity to terrestrial arthropods: N/A Toxicity to terrestrial plants: N/A

Toxicity to birds: N/A

Assessment / Classification: No known significant effects or critical hazards based on ingredients

12.2 Persistence and Degradability: No known significant effects or critical hazards

**Biodegradability**: Not relevant for inorganic substances such as ammonium nitrate, potassium nitrate and calcium fluoride

**12.3 Bioaccumulative Potential:** No known significant effects or critical hazards

**12.4 Mobility in Soil:** No known significant effects or critical hazards

12.5 Results of PBT and vPvB assessment: Not applicable, inorganic product

**12.6 Other Adverse Effects**: May cause eutrophication

### 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

Product: Do not contaminate ponds, waterways or ditches with significant quantities of

product

Check if agriculture use is possible. Dispose of by use on farm as a fertiliser, by

spreading thinly on open ground

Where possible recycling is preferred to disposal or incineration.

If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated Packaging:** Empty remaining contents.

Completely empty containers can be put in the bin or disposed of in compliance

with applicable local regulations



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

## 14. TRANSPORT INFORMATION

	Land transport	Inland	Sea	Air transport
	(ADR/RID)	waterway	transport	(ICAO-TI /
		transport	(IMDG)	IATA-DGR)
		(ADN)		
14.1 UN No.	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods
14.2 UN Proper shipping name	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods
14.3 Transport hazard class(es)	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods
Hazard label(s)	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods
14.4 Packing group	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods
14.5 Environmental hazards	Not dangerous	Not dangerous	Not	Not
	goods	goods	dangerous	dangerous
			goods	goods

14.6 Special precautions for user: None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Additional information: None



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Revision date: 29.01.2018 Print date:29.01.2018

#### 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance of mixture:

This mixture is classified in accordance with Directive 1999/45/EC, regulation 1272/2008 and the statutory instrument No.716 2009 Chemicals (Hazard Information and Packaging) regulations

**15.1.1** The mixture is also regulated by the following legislation:

EC Directives: 76/116/EEC (Relating to fertilisers)

National Regulations: The Fertiliser Regulation 1991 and subsequent amendments

**15.2 Chemical Safety Assessment:** This product contains substances for which Chemical Safety Assessments are still required

#### 16. OTHER INFORMATION

### 16.1 Indication of changes: None

#### 16.2 Abbreviations and Acronyms

ADR International Carriage of Dangerous Goods by Road

CAS No Chemicals Abstract Service Registry Number Directive 67/548/EEC Dangerous Substances Directive (DSD)

EC No European Community Number for chemicals within EU regulations

IATA-DGR Dangerous Goods Regulations by the International Air Transport Association

IMDG Code
PBT
Regulation (EC) No 1272/2008
International Maritime Dangerous Goods Code
Persistent, Bioaccumulative and Toxic Properties
Classification, Labelling and Packaging (CLP)

RID International Transport of Dangerous Goods by Rail vPvB Very Persistent and Very Bioaccumulative Properties

## 16.3 Key literature references and sources for data: Unknown

#### 16.4 Full text of Classifications

CLP/GHS: Eye Dam/ Irrit 2; Eye damage/ Irritation, Category 2

Ox. Sol. 3,; Oxidising solids, Category 3

DSD/DPD:
 O; Oxididsing

Xi; Irritant



According to Regulation (EC) No 1907/2006 (REACH)

Trade name: Gro-sure Rose and Shrub 6 month feed Version:1.0 Revision date: 29.01.2018

Print date:29.01.2018

### 16.5 Relevant R-, H- and EUH-phrases (number and full text):

H319 Causes serious eye irritation H272 May intensify fire; oxidiser

**16.6 Training advice**: Follow the instructions

#### 16.7 Further information

Before using this product, ensure that you read and understand its label

#### MSDS information:

This Safety Data Sheet is prepared in compliance with Directive 1999/45/EC, 1272/2008 and Annex I of the REACH regulation 453/2010.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. Individuals handling this product should be informed under COSHH of the recommended safety precautions and should have access to this information. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Westland Horticulture Limited does not accept responsibility for damage caused by incorrect use of this information.

### Training and related advice:

This document contains important information to ensure the safe storage, handling and use of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to the end user and that all necessary training to enable the product to be used correctly has been given.

For further information please contact Westland Horticulture Ltd, 14 Granville Industrial Estate, Granville Road, Dungannon, County Tyrone, BT70 1NJ.