

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

**Poliverdol****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Foliar Nutrient

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**

Certis Europe B.V. - United Kingdom

Suite 5, 3 Riverside

Granta Park - Great Abington

Cambridgeshire CB21 6AD

United Kingdom

Telephone no. +44 (0) 1223 894 261

Fax no. +44 (0)1223 891210

e-mail info@certiseurope.co.uk - www.certiseurope.co.uk

**Advice on Safety Data Sheet**

certis@certiseurope.co.uk

**1.4 Emergency telephone number**

Carechem 24 GB: +44 870 190 6777

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

This product does not meet the classification criteria given in the Regulation (EC) No 1272/2008 (CLP).

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

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**Signal word**

-

**Hazard statement(s)**

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**Hazard statements (EU)**

EUH210 Safety data sheet available on request.

**Precautionary statement(s)**

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**Labelling information**

The labelling (EU hazard statements) meets the criteria of annex II of Directive (EC) Nr. 1272/2008 (CLP).

**2.3 Other hazards**

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB

No data available.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Not applicable. The product is not a substance.

#### 3.2 Mixtures

##### Hazardous ingredients

No	Substance name	Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration
			%
1	<b>POTASSIUM NITRATE</b>		
	7757-79-1 231-818-8 - 01-2119488224-35	Ox. Sol. 3; H272	>= 5.00 - < 10.00 %-b.w.
2	<b>ammonium nitrate</b>		
	6484-52-2 229-347-8 - 01-2119490981-27	Ox. Sol. 3; H272 Eye Irrit. 2; H319	>= 5.00 - < 10.00 %-b.w.
3	<b>phosphoric acid</b>		<b>pls. refer to footnote (1)</b>
	7664-38-2 231-633-2 015-011-00-6 -	Skin Corr. 1B; H314 Eye Dam. 1; H318	< 5.00 %-b.w.
4	<b>copper sulphate, 5-hydrate</b>		
	7758-99-8 231-847-6 029-023-00-4 01-2119520566-40	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	< 0.10 %-b.w.

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	-	Eye Irrit. 2; H319: C >= 80%	-	-
3	B	Skin Irrit. 2; H315: C >= 10% Eye Irrit. 2; H319: C >= 10% Skin Corr. 1B; H314: C >= 25% Eye Dam. 1; H318: C >= 25%	-	-
4	-	-	M = 10	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General information

No special measures necessary. In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes and launder thoroughly before reusing.

##### After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

##### After skin contact

When in contact with the skin, clean with soap and water.

##### After eye contact

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes).

**After ingestion**

Call a doctor immediately and show label or packaging. Do not induce vomiting. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

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

No data available.

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

No data available.

**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Alcohol-resistant foam; Carbon dioxide; Extinguishing powder; Water spray jet

**Unsuitable extinguishing media**

High power water jet

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

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO); Ammonia (NH<sub>3</sub>); Nitrous oxides (NO<sub>x</sub>)

**5.3 Advice for firefighters**

Fire-fighting operations, rescue and clearing work under effect of combustion and smoulder gases just may be done with breathing apparatus. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations. Wear protective clothing.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

**For emergency responders**

No data available. Personal protective equipment (PPE) - see Section 8.

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

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

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). When collected, handle material as described under the section heading "Disposal considerations".

**6.4 Reference to other sections**

Information regarding waste disposal, see chapter 13. Information regarding personal protective measures, see chapter 8. Information regarding safe handling, see chapter 7.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Advice on safe handling**

No special measures necessary if stored and handled as prescribed. Provide good ventilation at the work area (local exhaust ventilation, if necessary).

**General protective and hygiene measures**

Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Do not eat, drink or smoke during work time. Remove soiled or soaked clothing immediately. Do not inhale vapours.

**Advice on protection against fire and explosion**

No special measures necessary.

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Keep from freezing. Protect from heat and direct sunlight.

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage. Keep only in the original container.

**Incompatible products**

Do not store together with foodstuffs.

**7.3 Specific end use(s)****Industry solution**

Always read the label and product information before use.

**SECTION 8: Exposure controls/personal protection****8.1 Control parameters****Occupational exposure limit values**

No	Substance name	CAS no.	EC no.
1	phosphoric acid	7664-38-2	231-633-2
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Orthophosphoric acid			
	WEL short-term (15 min reference period)	2	mg/m <sup>3</sup>
	WEL long-term (8-hr TWA reference period)	1	mg/m <sup>3</sup>
<b>2000/39/EC</b>			
Orthophosphoric acid			
	WEL short-term (15 min reference period)	2	mg/m <sup>3</sup>
	WEL long-term (8-hr TWA reference period)	1	mg/m <sup>3</sup>

**DNEL, DMEL and PNEC values****DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	<b>POTASSIUM NITRATE</b>			<b>7757-79-1</b> <b>231-818-8</b>	
	dermal	Long term (chronic)	systemic	20.8	mg/kg/day
	inhalative	Long term (chronic)	systemic	36.7	mg/m <sup>3</sup>
2	<b>ammonium nitrate</b>			<b>6484-52-2</b> <b>229-347-8</b>	
	dermal	Long term (chronic)	systemic	5.12	mg/kg/day
	inhalative	Long term (chronic)	systemic	36	mg/m <sup>3</sup>

**DNEL value (consumer)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	<b>POTASSIUM NITRATE</b>			<b>7757-79-1</b> <b>231-818-8</b>	
	oral	Long term (chronic)	systemic	12.5	mg/kg
	dermal	Long term (chronic)	systemic	12.5	mg/kg/day
	inhalative	Long term (chronic)	systemic	10.9	mg/kg
2	<b>ammonium nitrate</b>			<b>6484-52-2</b> <b>229-347-8</b>	
	oral	Long term (chronic)	systemic	2.56	mg/kg/day
	dermal	Long term (chronic)	systemic	2.56	mg/kg/day
	inhalative	Long term (chronic)	systemic	8.9	mg/m <sup>3</sup>

**PNEC values**

No	Substance name	CAS / EC no
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**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB

	ecological compartment	Type	Value
1	<b>POTASSIUM NITRATE</b>		<b>7757-79-1</b> <b>231-818-8</b>
	water	fresh water	0.45 mg/L
	water	marine water	0.045 mg/L
	water	Aqua intermittent	4.5 mg/L
	sewage treatment plant	-	18 mg/L
2	<b>ammonium nitrate</b>		<b>6484-52-2</b> <b>229-347-8</b>
	sewage treatment plant	-	18 mg/L

## 8.2 Exposure controls

### Appropriate engineering controls

No data available.

### Personal protective equipment

#### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

#### Eye / face protection

Safety glasses (EN 166)

#### Hand protection

In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties).

Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Appropriate Material nitrile rubber

#### Other

Chemical-resistant work clothes. Rubber boots. (EN 13832-3/EN ISO 20345)

### Environmental exposure controls

No data available.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Form/Colour</b>	
liquid	
<b>Odour</b>	
No data available	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
Value	5.5
Source	Manufacturer
<b>Boiling point / boiling range</b>	
No data available	
<b>Melting point / melting range</b>	
No data available	
<b>Decomposition point / decomposition range</b>	
No data available	
<b>Flash point</b>	
No data available	
<b>Auto-ignition temperature</b>	

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB

No data available

**Oxidising properties**

No data available

**Explosive properties**

No data available

**Flammability (solid, gas)**

No data available

**Lower flammability or explosive limits**

No data available

**Upper flammability or explosive limits**

No data available

**Vapour pressure**

No data available

**Vapour density**

No data available

**Evaporation rate**

No data available

**Relative density**

No data available

**Density**

Value	1.24	g/cm <sup>3</sup>
Source	Manufacturer	

**Solubility in water**

Comments	soluble
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**Solubility(ies)**

No data available

**Partition coefficient: n-octanol/water**

No data available

**Viscosity**

No data available

**9.2 Other information****Other information**

No data available.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

The product is stable under normal storage and handling conditions.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (See section 7).

**10.3 Possibility of hazardous reactions**

Dangerous reactions are not to be expected when handling product according to its intended use.

**10.4 Conditions to avoid**

None, if handled according to intended use. Beware of drying. Temperatures &gt; 40°C

**10.5 Incompatible materials**

Alkalis

**10.6 Hazardous decomposition products**Ammonia (NH<sub>3</sub>)

Trade name: Poliverdol

Product no.: CE 000 C0040 UK

Current version : 1.0.0, issued: 09.12.2019

Replaced version: -, issued: -

Region: GB

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Acute oral toxicity			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
LD50	>	2000	mg/kg bodyweight
Species	rat		
Method	OECD 425		
Source	ECHA		

Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
LD50	>	5000	mg/kg bodyweight
Species	rat		
Method	OECD 402		
Source	ECHA		

Acute inhalational toxicity			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
LC50	>	0.527	mg/l
Duration of exposure		4	h
State of aggregation	Dust		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Skin corrosion/irritation			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
Species with reference to	rabbit		
Method	CAS 6484-52-2		
Source	OECD 404		
Evaluation	ECHA		
	non-irritant		

Serious eye damage/irritation			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
Method	OECD 437		
Source	ECHA		
Evaluation	non-irritant		

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
Route of exposure	Skin		
Species	mouse		
Method	OECD 429		
Source	ECHA		
Evaluation	non-sensitizing		

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity			
No	Substance name	CAS no.	EC no.

Trade name: Poliverdol

Product no.: CE 000 C0040 UK

Current version : 1.0.0, issued: 09.12.2019

Replaced version: -, issued: -

Region: GB

1	POTASSIUM NITRATE	7757-79-1	231-818-8
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity			
No data available			

STOT - single exposure			
No data available			

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
Route of exposure	oral		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Aspiration hazard			
No data available			

## SECTION 12: Ecological information

### 12.1 Toxicity

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
LC50		1378	mg/l
Duration of exposure		96	h
Species	Poecilia reticulata		
Method	OECD 203		
Source	ECHA		

Toxicity to fish (chronic)			
No data available			

Toxicity to Daphnia (acute)			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
EC50		490	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	ECHA		

Toxicity to Daphnia (chronic)			
No data available			

Toxicity to algae (acute)			
No data available			

Toxicity to algae (chronic)			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
NOEC		1700	mg/l
Duration of exposure		10	day(s)
Species	Algae		
Source	ECHA		
2	ammonium nitrate	6484-52-2	229-347-8
EC50	>	1700	mg/l
Duration of exposure		10	day(s)
Species	Algae		
with reference to	CAS 7757-79-1		
Source	ECHA		



**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB

Bacteria toxicity			
No	Substance name	CAS no.	EC no.
1	POTASSIUM NITRATE	7757-79-1	231-818-8
EC50	>	1000	mg/l
Duration of exposure		3	h
Species	activated sludge		
Method	OECD 209		
Source	ECHA		

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information****Other information**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

**SECTION 14: Transport information****14.1 Transport ADR/RID/ADN**

The product is not subject to ADR/RID/ADN regulations.

**14.2 Transport IMDG**

The product is not subject to IMDG regulations.

**14.3 Transport ICAO-TI / IATA**

The product is not subject to ICAO-TI / IATA regulations.

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not relevant

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Trade name:** Poliverdol**Product no.:** CE 000 C0040 UK**Current version :** 1.0.0, issued: 09.12.2019**Replaced version:** -, issued: -**Region:** GB**EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

**REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

**Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	ammonium nitrate	6484-52-2	229-347-8	58, 65
2	ammonium-sulphate	7783-20-2	231-984-1	65
3	diammonium hydrogenorthophosphate	7783-28-0	231-987-8	65

**Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is not subject to Part 1 or 2 of Annex I.

**Other regulations**

Adhere to the national sanitary and occupational safety regulations when using this product.

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out for this mixture.

**SECTION 16: Other information****Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

**Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)**

**B** Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

**Department issuing safety data sheet**

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**Trade name:** Poliverdol

**Product no.:** CE 000 C0040 UK

**Current version :** 1.0.0, issued: 09.12.2019

**Replaced version:** -, issued: -

**Region:** GB

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This information is based on our present knowledge and experience.  
The safety data sheet describes products with a view to safety requirements.  
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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