

**Section 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Product name: **KPlus**

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

Use of substance / mixture: PC27: Plant protection products.

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

Company name: **Progreen Weed Control Solutions Ltd**  
**Units 7 & 8**  
**Spalding Road Business Park**  
**Spalding Road**  
**Bourne**  
**Lincs**  
**PE10 9LF**

Tel: **(01778) 394052**

Fax:

Email:

**1.4. Emergency telephone number**

Emergency tel: +44 (0) 870 190 6777  
(office hours only)

**Section 2: Hazards identification**

**2.1. Classification of the substance or mixture**

Classification under CLP: Eye Irrit. 2: H319

Most important adverse effects: Causes serious eye irritation.

**2.2. Label elements**

Label elements:

Hazard statements: H319: Causes serious eye irritation.

Hazard pictograms: GHS07: Exclamation mark



Signal words: Warning

Precautionary statements: 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.  
P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.  
P502: Refer to manufacturer or supplier for information on recovery or recycling.

[cont...]

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## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

## 3.2. Mixtures

## Hazardous ingredients:

CITRIC ACID - REACH registered number(s): 01-2119457026-42-0000

EINECS	CAS	PBT / WEL	CLP Classification	Percent
201-069-1	77-92-9	-	Eye Irrit. 2: H319	1-3%

DIPROPYLENE GLYCOL MONOMETHYL ETHER - REACH registered number(s): 01-2119450011-60-0000

252-104-2	34590-94-8	Substance with a Community workplace exposure limit.	-	1-3%
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D-GLUCOPYRANOSE, OLIGOMERS, DECYL OCTYL GLYCOSIDES - REACH registered number(s): 01-2119488530-36-0000

500-220-1	68515-73-1	-	Eye Dam. 1: H318	1-3%
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## Section 4: First aid measures

## 4.1. Description of first aid measures

**Skin contact:** Wash immediately with plenty of soap and water.

**Eye contact:** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination.

**Ingestion:** Wash out mouth with water.

**Inhalation:** Not applicable.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

**Immediate / special treatment:** Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. Eye bathing equipment should be available on the premises.

## Section 5: Fire-fighting measures

## 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers.

[cont...]

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[cont...]

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5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes.

5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Mark out the contaminated area with signs and prevent access to unauthorised personnel. Do not attempt to take action without suitable protective clothing - see section 8 of SDS. Turn leaking containers leak-side up to prevent the escape of liquid.

6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS. Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area. Avoid the formation or spread of mists in the air.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.

**Suitable packaging:** Must only be kept in original packaging.

7.3. Specific end use(s)

**Specific end use(s):** PC27: Plant protection products.

Section 8: Exposure controls/personal protection

8.1. Control parameters

**Workplace exposure limits:** No data available.

DNEL/PNEC Values

**Hazardous ingredients:**

[cont...]

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## CITRIC ACID.

Type	Exposure	Value	Population	Effect
PNEC	Fresh water	0.44 mg/L	-	-
PNEC	Marine water	0.044 mg/L	-	-
PNEC	Soil (agricultural)	33.1 mg/kg soil dw	-	-

## DIPROPYLENE GLYCOL MONOMETHYL ETHER

Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	308 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (repeated dose)	283 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (repeated dose)	37.2 mg/m <sup>3</sup>	General Population	Systemic
DNEL	Dermal (repeated dose)	121 mg/kg bw/day	General Population	Systemic
DNEL	Dermal (repeated dose)	36 mg/kg bw/day	General Population	Systemic
PNEC	Fresh water	19 mg/L	-	-
PNEC	Marine water	1.9 mg/L	-	-
PNEC	Fresh water sediments	70.2 mg/kg sediment	-	-
PNEC	Marine sediments	7.02 mg/kg sediment	-	-
PNEC	Soil (agricultural)	2.74 mg/kg soil dw	-	-

## D-GLUCOPYRANOSE, OLIGOMERS, DECYL OCTYL GLYCOSIDES

Type	Exposure	Value	Population	Effect
DNEL	Dermal	59500mg/kg	Workers	Systemic
DNEL	Inhalation	420mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal	357000mg/kg	Consumers	Systemic
DNEL	Inhalation	124mg/m <sup>3</sup>	Consumers	Systemic
DNEL	Oral	35.7mg/kg	Consumers	Systemic
PNEC	Fresh water	0.1mg/l	-	-
PNEC	Marine water	0.01mg/l	-	-
PNEC	Fresh water sediments	0.487mg/kg	-	-
PNEC	Marine sediments	0.048mg/kg	-	-
PNEC	Microorganisms in sewage treatment	560mg/l	-	-
PNEC	Soil (agricultural)	0.654mg/kg	-	-

## 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area. Ensure there is exhaust ventilation of the area. Ensure all engineering measures mentioned in section 7 of SDS are in place.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.

**Hand protection:** Protective gloves. BS EN 374:2003 / EN ISO 374-1:2016

**Eye protection:** Tightly fitting safety goggles. Ensure eye bath is to hand.

**Skin protection:** Protective clothing.

**Environmental:** Refer to specific Member State legislation for requirements under Community environmental legislation.

[cont...]

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Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<b>State:</b>	Liquid	
<b>Colour:</b>	Colourless	
<b>Odour:</b>	Barely perceptible odour	
<b>Evaporation rate:</b>	No data available.	
<b>Oxidising:</b>	No data available.	
<b>Solubility in water:</b>	No data available.	
<b>Viscosity:</b>	Viscous	
<b>Kinematic viscosity:</b>	2150 cPs	
<b>Boiling point/range°C:</b>	ca. 100	<b>Melting point/range°C:</b> ca. -5
<b>Flammability limits %: lower:</b>	No data available.	<b>upper:</b> No data available.
<b>Flash point°C:</b>	No data available.	<b>Part.coeff. n-octanol/water:</b> No data available.
<b>Autoflammability°C:</b>	No data available.	<b>Vapour pressure:</b> No data available.
<b>Relative density:</b>	1.305 - 1.335	<b>pH:</b> 2.2 - 3.2
<b>VOC g/l:</b>	No data available.	

9.2. Other information

**Other information:** Not applicable.

Section 10: Stability and reactivity

10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.  
Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

**Conditions to avoid:** Heat.

10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids. Bases.

10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

[cont...]

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**Hazardous ingredients:**

**CITRIC ACID.**

ORL	MUS	LD50	5040	mg/kg
ORL	RAT	LD50	3	gm/kg
SCU	RAT	LD50	5500	mg/kg

**D-GLUCOPYRANOSE, OLIGOMERS, DECYL OCTYL GLYCOSIDES**

DERMAL	RAT	LD50	> 2000	mg/kg
ORAL	RAT	LD50	> 2000	mg/kg

**Relevant hazards for product:**

Hazard	Route	Basis
Serious eye damage/irritation	OPT	Hazardous: calculated

**Symptoms / routes of exposure**

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

**Ingestion:** There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

**Other information:** Not applicable.

**Section 12: Ecological information**

**12.1. Toxicity**

**Hazardous ingredients:**

**D-GLUCOPYRANOSE, OLIGOMERS, DECYL OCTYL GLYCOSIDES**

Daphnia magna	48H EC50	> 100	mg/l
MARINE ALGAE (Skeletonema costatum)	72H ErC50	20.71	mg/l
SHEEPSHEAD MINNOWS (Cyprindodon variegat	96H LC50	21	mg/l
Scenedesmus Subspicatus	72H ErC50	27 - 39	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	100 - 126	mg/l

**12.2. Persistence and degradability**

**Persistence and degradability:** Biodegradable.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential:** No bioaccumulation potential.

**12.4. Mobility in soil**

**Mobility:** Readily absorbed into soil.

[cont...]

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12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

**Other adverse effects:** Negligible ecotoxicity.

Section 13: Disposal considerations

13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company. Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the other possible disposal operations (e.g. evaporation, drying, calcination, etc.).

**Recovery operations:** Land treatment resulting in benefit to agriculture or ecological improvement.

**Disposal of packaging:** Dispose of in a regulated landfill site or other method for hazardous or toxic wastes.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

**Transport class:** This product does not require a classification for transport.

Section 15: Regulatory information

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

**Specific regulations:** Not applicable.

15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

**Other information:** according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H318: Causes serious eye damage.

H319: Causes serious eye irritation.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

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