

# MATERIAL SAFETY DATA SHEET

Date prepared: 13 October 2013  
Date revised: (first edition)

## 1. Identification of the Substance/ Preparation and the Company/Undertaking

Substance or preparation trade name	PK Warrior
Company/undertaking name & address	Shogun Fertilizers Kemp House 152 City Road London. EC1V 2NX
Emergency telephone	
Email	

## 2. Composition

Substance	Liquid nutrient solution
% Content	Phosphorus (P <sub>2</sub> O <sub>5</sub> ) – 9% w/v Potassium (K <sub>2</sub> O) – 18%w/v Sulphur (S) - 6.8%w/v
CAS Number	N/A
Classification	Product not classified
EINECS	N/A

## 3. Hazards Identification

PRIMARY HAZARDS	None.
HEALTH EFFECTS:	
- EYES	May cause irritation and watering
- INGESTION	May cause nausea and vomiting
- INHALATION	Not likely under normal use, however if allowed to become airborne, may cause irritation of nose, throat and lungs.
- SKIN	Prolonged contact may cause irritation and allergic dermatitis and possibly hypersensitive reactions in some people.

## 4. First aid measures

Skin contact	Immediately irrigate with or clean water
Eye contact	Immediately irrigate with eyewash or clean water for 5 mins
Ingestion	Drink plenty of water and seek medical attention - display label where possible

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### 5. Fire fighting measures

Suitable extinguishing media	NON-FLAMMABLE. NON-COMBUSTIBLE. Use extinguishers suitable to surrounding materials. Water spray, AFFF foam, chemical dry powder or carbon dioxide.
Unsuitable extinguishing media	None
Special hazards in fire	None
Required special protective equipment for fire fighters	Self-contained breathing apparatus.

### 6. Accidental release measures

Spillages	Ensure suitable gloves and goggles are worn during removal of spillage
Personal precautions	Wear suitable gloves and goggles in case of splashes
Environmental precautions	Ensure product is not disposed of in waterways.

### 7. Handling and storage

Handling	Prevent contact with eyes, skin and clothing. Wash after handling.
Storage	Store above 7°C to prevent crystallisation. Keep away from direct sunlight.

### 8. Exposure Controls

Eye protection	Wear safety goggles.
Hand protection	Wear rubber gloves
Hygiene measures	An eyewash should be nearby and ready for use.

### 9. Physical and chemical properties

Appearance	Clear colourless/yellow liquid
Odour	None
pH	6.3-7.3
Boiling point	No data
Melting point	No data
Flashpoint	None combustible
Explosive properties	No data
Vapour pressure	No data
Relative density	1.25 kg/l
Solubility	Completely miscible

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### 10. Stability and reactivity

Stability	Stable
Conditions to avoid	Temperatures above 50°C, below 4°C.
Materials to avoid	Strong oxidizing agents and strong reducing agents
Hazardous decomposition products	None

### 11. Toxicological information

Acute toxicity	N/A
Local effects	N/A
Excessive exposure may affect human health as follows:	
- Skin contact;	Irritant, prolonged exposure may cause dermatitis.
- Eye contact;	Irritant
- Inhalation;	Cause vomiting if ingested
- Ingestion:	Cause vomiting if ingested

### 12. Ecological information

Environmental fate and Distribution	The product is soluble in water. The product has low potential for bioaccumulation. The product has high mobility in soil.
Toxicity	Poses no significant threat.

### 13. Disposal Considerations

Disposal should be in accordance with local national legislation.

### 14. Transport information

Classification data:	N/A
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### 15. Regulatory information

N/A