

# Product Safety Data Sheet


Conforms to REGULATION (EU) No. 453/2010



Group Number	8
Version	1.2
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## PK Fertilizers

<b>1.0 Identification of the substance/mixture and of the company/undertaking</b>	
<b>1.1 Product Identifier</b>	
Product/Trade name	Glasson Fertilizers 00-24-24; 00-20-30; 00-30-20; 00-18-36; 00-10-40; and any other nitrogen-free solid compound fertilizers containing P and K.
Common chemical name	PK fertilizer, compound fertilizers
Synonyms	Not applicable.
Chemical formula	Not applicable.
EU index number	Not applicable.
EC No	Not applicable.
CAS No.	Not applicable.
REACH Registration Number.	Not applicable as the fertilizer is a mixture.
National Product Registration Number, where applicable	Not applicable.
<b>1.2 Relevant identified uses of the substance or mixture and uses advised against</b>	
Use of the substance/mixture	Fertilizer
Uses advised against	The use of this substance should be limited to those specified in this SDS.
<b>1.3 Details of the supplier of the safety data sheet</b>	
Manufacturer/Importer/Supplier	<b>Glasson Fertilizers</b> West Quay, Glasson Dock Lancaster, LA2 0DB Tel: +44 (0) 1524 753600 <a href="mailto:fertilizers@glassongrain.co.uk">fertilizers@glassongrain.co.uk</a>
<b>1.4 Emergency telephone number</b>	+44 (0)1524 753600 (7:30am - 5:00pm)

<b>2 Hazards identification</b>	
<b>2.1 Classification of the substance or mixture</b>	
Classification in accordance with Regulation 1272/2008 (CLP)	Eye Irrit. 1, H318
Hazard Statement(s)	H318 - causes serious eye damage
Classification in accordance with Directive 67/548 (DSD)	Xi;R41
Risk phrase(s)	R41 - Risk of serious damage to eyes
<b>2.2 Label elements</b>	
Hazard pictogram(s)	 Contains: Triple Super Phosphate
Signal word	Danger
Hazard Statement(s)	H318 - causes serious eye damage

	<b>Precautionary statement(s)</b>	P280 P264 P305 + P351 + P338  P501	Wear protective gloves/clothing Wash thoroughly after handling If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Store away from incompatible materials. Dispose of contents/container in accordance with local/regional/national/international regs
2.3	<b>Other hazards</b>		
	<b>PBT/vPvB criteria</b>	According to Annex XIII of Regulation (EC) No 1907/2006, no PBT and vPvB assessment has been conducted.	
	<b>Other hazards which do not result in classification</b>		
	<b>Physical and chemical hazards</b>	Fertilizers are basically harmless products when handled correctly. However, the following points should be noted for heating and fire. The fertilizer is not itself combustible. On heating or fire, toxic fumes containing phosphorous oxides, (e.g. P <sub>2</sub> O <sub>5</sub> ), sulphur oxides, (SO <sub>x</sub> ), hydrogen chloride gas and danger of toxic flourine based pyrolysis products may be present.	
	<b>Health hazards</b>	The fertilizers are basically harmless products when handled correctly. However, most important symptoms and effects both acute and delayed is eye irritation. Prolonged or repeated contact with skin may cause discomfort, ingestion of large quantities may give rise to gastro-intestinal disorders and inhalation of dust at high concentrations may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing.	
	<b>Environmental hazards</b>	Heavy spillage of nitrate and phosphate may cause adverse environmental impact such as eutrophication in confined surface waters or nitrate contamination. See Section 12.	

<b>3</b>	<b>Composition/information on ingredients</b>						
	Mixture						
	Chemical name	CAS no.	EC no.	Generic REACh Reg No.)	Classification Regulation (EC) No. 1272/2008	Classification Directive 67/548/EEC	% (w/w)
	Triple Superphosphate	65996-95-4	266-030-3	01-2119493057-33-xxxx	Eye Dam. 1, H318	Xi;R41	Variable
	Diammonium Phosphate	7783-28-0	231-987-8	01-2119490974-22-xxxx	-	-	Variable
	Monoammonium Phosphate	7722-76-1	231-764-5	01-2119488166-29-xxxx	-	-	Variable
	Potassium Chloride	7447-40-7	231-211-8	Exempt	-	-	Variable
	Magnesium Sulphate	14168-73-1	231-298-2	Exempt	-	-	Variable
	Calcium Carbonate	471-34-1	207-439-9	Exempt	-	-	Variable
	Potassium Sulphate	7778-80-5	231-915-5	01-2119489441-34-xxxx	-	-	Variable
	EC no. means EINECS or ELINCS number.						
	<i>This safety data sheet is not a guarantee of product specification or NPK value(s). NPK content is specified on sales orders, customer invoices, or product specifications.</i>						

<b>4.0</b>	<b>First aid measures</b>	
<b>4.1</b>	<b>Description of first aid measures</b>	
	<b>General</b>	In some cases medical attention necessary (see below).
	<b>Inhalation</b>	Remove from source of exposure to dusts. Obtain medical attention if ill effects occur.
	<b>Ingestion</b>	Do not induce vomiting. Rinse mouth and then give water or milk to drink. Obtain medical attention if more than a small quantity has been swallowed.
	<b>Skin contact</b>	Wash the affected area with water.
	<b>Eye contact</b>	Flush/irrigate eyes with copious amounts of water for at least 15 minutes. Remove contact lenses if present and easy to do so. Obtain medical attention if symptoms persist.
<b>4.2</b>	<b>Most important symptoms and effects, both acute and delayed</b>	
	<b>Acute effects</b>	Symptoms include itching, burning, redness, and tearing of eyes.
	<b>Delayed effects</b>	None known.
<b>4.3</b>	<b>Indication of any immediate medical attention and special treatment needed</b>	
	<b>Note to physician</b>	Treat symptomatically. Contact poison centre specialist immediately if large quantities have been ingested or inhaled.

<b>5.0</b>	<b>Fire-fighting measures</b>	
<b>5.1</b>	<b>Extinguishing media</b>	
	<b>Suitable extinguishing media</b>	<b>If fertilizer is not directly involved in the fire</b> Use the best means available to extinguish the fire.. <b>If fertilizer is involved in the fire</b> The product is not flammable. Use plenty of water.
	<b>Unsuitable extinguishing media</b>	Do not use chemical extinguishers or foams or attempt to smother the fire with steam or sand.
<b>5.2</b>	<b>Special hazards arising from the substance or mixture</b>	
	<b>Specific hazards</b>	No specific fire or explosion hazard.
	<b>Hazardous thermal decomposition and combustion products</b>	Phosphorous oxides, (e.g. P <sub>2</sub> O <sub>5</sub> ), sulphur oxides, (SO <sub>x</sub> ), and danger of toxic fluorine based pyrolysis products; Phosphates, (P inclusion), and, Hydrogen chloride gas; Potassium Chloride (K inclusion).
<b>5.3</b>	<b>Advice for firefighters</b>	
	<b>Special fire fighting procedures</b>	Open doors and windows of the store to give maximum ventilation. Avoid breathing the fumes (toxic); stand up-wind of the fire. Prevent any contamination of fertilizer by oils or other combustible materials.
	<b>Special protective equipment for fire-fighters</b>	Use a self-contained breathing apparatus if fumes are being entered.

<b>6.0</b>	<b>Accidental release measures</b>	
<b>6.1</b>	<b>Personal precautions, protective equipment and emergency procedures</b>	Avoid walking through spilled product and exposure to dust.
<b>6.2</b>	<b>Environmental precautions</b>	Take care to avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses.
<b>6.3</b>	<b>Methods and material for containment and cleaning up</b>	Any spillage of fertilizer should be cleaned up promptly, swept up and placed in a clean labelled open container for safe disposal, avoiding dusty conditions. Do not mix with sawdust and other combustible or organic substances. Dilute any contaminated or fine grained fertilizer with inert materials such as limestone/dolomite, mineral phosphate, gypsum, sand or dissolve in water.
<b>6.4</b>	<b>Reference to other sections</b>	See section 1 for emergency contact information, section 8 for personal protective equipment and section 13 for waste disposal.

<b>7.0</b>	<b>Handling and storage</b>	
	The information in this section contains generic advice and guidance. The list of identified uses given in section 1 should be considered for any use-specific information provided in the Exposure Scenario(s).	
<b>7.1</b>	<b>Precautions for safe handling</b>	Avoid excessive generation of dust. Avoid contamination by combustible (e.g. diesel oil, grease, etc.) and/or other incompatible materials. Avoid unnecessary exposure to the atmosphere to prevent moisture pick-up. When handling the product over long periods use appropriate personal protective equipment, e.g. gloves. Carefully clean all equipment prior to maintenance and repair.
<b>7.2</b>	<b>Conditions for safe storage, including any incompatibilities</b>	Store in compliance with national and local regulations Locate away from the sources of heat or fire. Keep away from combustible materials and substances mentioned under Section 10. On farm, ensure that the fertilizer is not stored near hay, straw, grain, diesel oil, etc. When stored loose, take particular care to avoid mixing with other fertilizers. Ensure high standard of housekeeping in the storage area. Do not permit smoking and use of naked lights in the storage areas. Restrict stack size (according to local regulations) and keep at least 1m distance around the stacks of bagged products. Any building used for the storage should be dry and well ventilated. Where the nature of the bagged product and climatic conditions so require, store under conditions that will avoid product breakdown by thermal cycling (wide variation in temperature). The product should not be stored in direct sunlight to avoid physical breakdown due to thermal cycling.  Packaging materials: Plastic synthetic materials, steel and aluminum are suitable. Avoid use of copper and zinc.
<b>7.3</b>	<b>Specific end use(s)</b>	Fertiliser.

<b>8.0</b>	<b>Exposure controls/personal protection</b>	
	The information in this section contains generic advice and guidance. The list of identified uses given in section 1 should be considered for any use-specific information provided in the Exposure Scenario(s).	
<b>8.1</b>	<b>Control parameters</b>	
	<b>Regulated Exposure limit values</b>	No specific EU official limit.
	<b>Recommended occupational and consumer exposure limit values (following from the performed CSA): For Triple Superphosphate</b>	Exposure pattern Derived No Effect Level (DNEL) Workers Oral Not applicable Dermal 17.4 mg/kg bw/day Inhalation 3.1mg/m <sup>3</sup> The long-term DNEL is considered sufficient to ensure that effects from acute exposure to the substance do not occur.

8.2	<b>PNEC For Triple Superphosphate</b>	fresh water: 1.7 mg/l	marine water: 0.17 mg/l	Intermittent use/release: 17 mg/l	Sewage treatment plant: 10 mg/l
	<b>Exposure controls</b>				
	<b>Appropriate engineering measures</b>	Avoid high dust concentration and provide ventilation where necessary.			
	<b>Hygienic measures</b>	When handling the product do not eat, drink or smoke. Wash hands after handling and before eating, smoking and using the lavatory and at the end of the working period.			
	<b>Individual protection</b>				
	<b>Respiratory system</b>	If dust concentration is high and/or ventilation is inadequate, use suitable dust mask or respirator with an appropriate filter (e.g. EN 143, 149, filters P1).			
	<b>Skin and body</b>	Working clothes.			
	<b>Hands</b>	Wear suitable gloves (e.g. plastic, rubber or leather) when handling the product over long periods.			
	<b>Eyes</b>	Use appropriate safety eye wear depending on the task being carried out.			
	<b>Environmental exposure controls</b>	Avoid the contamination of watercourses and drains and inform the appropriate authority in case of accidental contamination of watercourses. Do not flush into surface water or sanitary sewer system.			

9.0 Physical and chemical properties	
<b>Appearance</b>	Solid grey, red, or brown granules or prills unless deliberately coloured during manufacture.
<b>Odour</b>	Odourless.
<b>Odour threshold</b>	Not applicable
<b>pH</b>	Usually > 4.5
<b>Melting point/freezing point</b>	160-170°C depending on moisture content, ammonium nitrate main component
<b>Initial boiling point and boiling range</b>	Decomposes.
<b>Flash point</b>	Not applicable, as the fertilizer is a mixture of inorganic solids
<b>Flammability (solid, gas)</b>	Not flammable
<b>Upper/lower flammability or explosive limits</b>	Not applicable
<b>Explosive properties</b>	Not determined
<b>Auto-ignition temperature</b>	Not determined
<b>Decomposition temperature</b>	May start to decompose above approx. 170°C.
<b>Minimum ignition energy</b>	Not applicable
<b>Oxidising properties</b>	Not classified as an oxidizer
<b>Critical temperature</b>	Not applicable
<b>Relative density</b>	Not applicable
<b>Density</b>	Not determined
<b>Loose bulk density</b>	Normally between 900-1200 kg/m <sup>3</sup> .
<b>Vapour pressure at 20°C</b>	Not applicable

<b>Vapour density</b>	Not applicable
<b>Partition coefficient (n-octanol/water)</b>	Not applicable
<b>Viscosity</b>	Not applicable
<b>Mean particle size</b>	2-4mm approx.
<b>Water solubility</b>	Not applicable
<b>Surface tension</b>	Not surface active (based on molecular structure)
<b>Other information</b>	
<b>Miscibility</b>	Not applicable
<b>Fat solubility</b>	Not available
<b>Gas group</b>	Not applicable
<b>Remarks</b>	No further information available

<b>10.0</b>	<b>Stability and reactivity</b>	
<b>10.1</b>	<b>Reactivity</b>	Stable under recommended storage and handling conditions (see section 7, handling and storage).
<b>10.2</b>	<b>Chemical stability</b>	Stable under recommended storage and handling conditions (see section 7, handling and storage).
<b>10.3</b>	<b>Possibility of hazardous reactions</b>	When heated can decompose.
<b>10.4</b>	<b>Conditions to avoid</b>	Heating above 170°C (decomposes to gases). Contamination by incompatible materials. Unnecessary exposure to the atmosphere. Sources of heat or fire close to the product. Heating under confinement. Welding or hot work on equipment or plant which may have contained fertilizer without first washing thoroughly to remove all fertilizer.
<b>10.5</b>	<b>Incompatible materials</b>	Combustible materials, reducing agents, acids, alkalis, sulphur, chlorates, chromates, nitrites, permanganates, metallic powders and substances containing metals such as copper, nickel, cobalt, zinc and their alloys.
<b>10.6</b>	<b>Hazardous decomposition products</b>	For fire situation: see section 5. When strongly heated, it melts and decomposes releasing toxic fumes (e.g. NO <sub>x</sub> , ammonia and other gases depending on composition) When in contact with alkaline material such as lime, may give off ammonia gas. See also Sections 2 and 9.

<b>11.0</b>	<b>Toxicological information</b>	
<b>11.1</b>	<b>Information on toxicological effects</b>	
	<b>Toxicokinetics, metabolism and distribution</b>	Not available
	<b>Acute toxicity</b>	Ingredients
	<b>Acute oral toxicity</b>	Triple Superphosphate LD50: > 2000 mg/kg bw
	<b>Acute dermal toxicity</b>	Triple Superphosphate LD50: > 5000 mg/kg bw
	<b>Acute inhalation toxicity</b>	Triple Superphosphate LC50: > 5 g/m <sup>3</sup> (no guideline followed)
	<b>Acute oral toxicity</b>	Potassium Chloride LD50: > 3020 mg/kg
	<b>Local effects</b>	
	<b>Skin irritation</b>	Product No critical or specific hazard
	<b>Eye irritation</b>	Product Irritating (OECD 405)
	<b>Sensitisation</b>	Not sensitizing (OECD 429, with triple superphosphate, and potassium chloride)
	<b>Other</b>	
	<b>Sub-acute toxicity</b>	Oral 90-day NOAEL = 256 mg/kg bw/day (OECD 422, with triple superphosphate) Inhalation no specific data
	<b>Mutagenicity</b>	No known significant effects or critical hazards.
	<b>Reproductive toxicity</b>	No known significant effects or critical hazards.
	<b>Carcinogenicity</b>	No known significant effects or critical hazards.
	<b>Remarks</b>	Adverse health effects are considered unlikely when the product is handled and used correctly. If large quantities are ingested may give rise to gastro-intestinal disorders.

<b>12.0</b>	<b>Ecological information</b>	
<b>12.1</b>	<b>Toxicity</b>	
	<b>Triple Superphosphate</b>	
	Fish	96-h Acute LC50: >85.9 mg/l, freshwater, (OECD 203).
	Daphnia magna	72-h Acute LC50: 1.790 mg/l, aquatic invertebrates - Water flea.
	Algae	72-h Acute EC50: > 87.6 mg/l, aquatic plants - Algae.
	Inhibition of microbial activity	No data.

12.2	<b>Persistence and degradability</b>	<b>Potassium Chloride</b>	Fish	LC50: 880 mg/l, species Pimephales Promelas, (fathead minnow), 96 hour period, OECD Test Guideline 203.
		Daphnia magna	EC50: 440 - 880 mg/l, species Daphnia Magna, (water flea), 48 hour period, OECD Test Guideline 202.	
		Algae	EC50: >100 mg/l, species Desmodesmus Subspicatus, (green algae), 72 hour period, OECD Test Guideline 201.	
		Bacteria	EC50: >1000mg/l, activated sludge, 3 hour period, OECD Test Guideline 209.	
		Ingredient name	Triple Superphosphate	
12.3	<b>Bioaccumulative potential</b>	<b>Biodegradation</b>	Standard test is not applicable as the mixture is inorganic.	
		<b>Hydrolysis</b>	No hydrolysable group is present, will completely dissociate into ions.	
		Octanol-water partition coefficient (Kow)	Not relevant as the mixture is inorganic, but considered to be low (based on high water solubility)	
		Bioconcentration factor (BCF)	Low potential for bioaccumulation (based on main ingredient properties).	
12.4	<b>Mobility in soil</b>	Low potential for adsorption (based on main ingredient properties)		
12.5	<b>Results of PBT and vPvB assessment</b>	Not applicable		
12.6	<b>Other adverse effects</b>	Heavy spillage may cause adverse environmental impact such as eutrophication in confined surface waters.		

13.0 Disposal considerations	
Container	Containers should be cleaned by appropriate method and then re-used or disposed by landfill or incineration as appropriate, in accordance with local and national regulations. Do not remove label until container is thoroughly cleaned.
Methods of disposal	Depending on degree and nature of contamination dispose of by use as fertilizer on farm, as raw material for liquid fertilizer, or to an authorised waste facility. Do not empty into drains; dispose of this material and its container in a safe way and in accordance with all applicable local and national regulations. See chapters 06 03 and 06 10 of the list of wastes (Commission decision 2000/532/EC )
Package waste disposal	Empty the bag by shaking to remove as much as possible of its contents. If approved by local authorities, empty bags may be disposed of as non-hazardous material or returned for recycling.
<i>Note: see section 7 for safe handling and storage</i>	

14.0 Transport information						
		ADR/RID	ADN/ADNR	IMDG	ICAO/IATA	
14.1	UN Number	Not classified	Not classified	Not classified	Not classified	
14.2	UN Proper shipping name	Fertilizer	Fertilizer	Fertilizer	Fertilizer	
14.3	Transport hazard class(es)	Not classified	Not classified	Not classified	Not classified	
14.4	Packing group	Not applicable	Not applicable	Not applicable	Not applicable	
	Label	Not applicable	Not applicable	Not applicable	Not applicable	
14.5	Environmental hazards	Not applicable.				
14.6	Special precautions for user	None.				
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.				

15.0 Regulatory information		
15.1	Safety, health and environmental regulation/legislation specific for the substance or mixture	None applicable
	Other regulations	Regulation EC 1907/2006 (REACH), EC 2003/2003, 96/82 EC. Decision No 1348/2008/EC of the European Parliament & of the Council and Commission Regulation (EC) No 552/2009.
15.2	Chemical safety assessment	In accordance with REACH Article 14, a Chemical Safety Assessment has been carried out for the main ingredient Triple Superphosphate as a substance.

16.0 Other information	
The information provided in this safety data sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any proceed, unless specified in the text.	
Classification in accordance with Regulation 1272/2008, as listed in Annex VI:	None.
Classification in accordance with Regulation 1272/2008, by self-classification based on the performed CSA	Eye Dam. Irrit. 1, H318 - causes serious eye damage.
Risk phrases	R41 Risk of serious damage to eyes.
Symbols	Xi irritant
Abbreviations and acronyms	Eye irritation Category 2 (Eye Irrit. 2) Causes serious eye irritation (H319)
Training advice	
Date of previous SDS	September 2014
Modifications in this version	None.
References	EFMA/Fertilizers Europe Guidance documents, TFI HPV data; NOTOX gap analysis

Disclaimer

The information in this Safety Data Sheet is given in good faith and belief in its accuracy based on our knowledge of the substance/preparation concerned at the date of publication. It does not imply the acceptance of any legal liability or responsibility whatsoever by Glasson Fertilizers for the consequences of its use or misuse in any particular circumstances.

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