

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material name	Single Superphosphate
Recommended use	Fertiliser
Version No.	04
Synonym(s)	SSP
Product code	KFAu_SSP_EU_EN
Manufacturer	Koch Fertiliser Australia Pty Ltd. PO Box 7024 St Kilda Rd, Victoria 8000 Australia
Telephone	+61 3 9452 8200 or +1.316.828.7672
Fax	+61 3 9867 7030
Emergency telephone	Email: kochmsds@kochind.com For Chemical Emergency Call CHEMTREC day or night USA/Canada - 1.800.424.9300 Outside USA/Canada - 1.703.527.3887 (Please reverse charges)

2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Percent
Superphosphate	8011-76-5	> 90
Trace elements	N/A	< 10
Fluoride	-	<= 2.5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. FIRST-AID MEASURES

Inhalation	Move person to fresh air. Get medical attention if any discomfort continues.
Skin contact	Wash off with plenty of water. Get medical attention if irritation develops or persists.
Eye contact	Do not rub eye. Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort occurs.
Notes to physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.
Unusual fire & explosion hazards	During fire, gases hazardous to health may be formed.
Specific hazards	None known.
Special protective equipment for fire-fighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus, operated in positive pressure mode and full protective clothing must be worn in case of fire.
Specific methods	Move container from fire area if it can be done without risk.
Hazchem Code	None
Hazardous combustion products	Phosphorus oxides. Sulphur oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid inhalation of dust. Avoid contact with skin and eyes. Avoid generation and spreading of dust. For personal protection, see section 8 of the SDS.
Environmental precautions	Prevent further leakage or spillage if safe to do so.
Containment procedures	Stop the flow of material, if this is without risk. Collect and dispose of spillage as indicated in section 13 of the SDS.
Methods for cleaning up	Collect spill using a vacuum cleaner with a HEPA filter. Flush area with plenty of water.

7. HANDLING AND STORAGE

Handling	Avoid generation and spreading of dust. Avoid inhalation of dust and contact with skin and eyes. Use with adequate ventilation. Observe good industrial hygiene practices.
Storage	Store in a cool, dry, well-ventilated place. Store away from incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Recommended monitoring procedures

Additional exposure data	ACGIH has limits for "nuisance dusts" which is TLV-TWA = 10 mg/m ³ and for "Fluorides, as F" which is TLV-TWA = 2.5 mg/m ³ .
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Engineering measures	Provide adequate ventilation. The risk of inhalation of dust should be minimized as much as possible.
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Personal protective equipment

Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter.
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Hand protection	Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.
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Eye protection	Risk of contact: Wear dust goggles.
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Skin and body protection	No skin protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
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Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.
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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Granules.
Physical state	Solid.
Form	Granules.
Colour	Grey. Brown.
Odour	Slight acidic.
Odour threshold	Not available.
pH	5.4 - 10 (5% solution)
Vapour pressure	Not available.
Vapour density	2.57 (Air = 1)
Boiling point	Not available.
Melting point/freezing point	Not available.
Solubility (water)	99.5 - 99.999 %
Flash point	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Bulk density	1100 kg/m ³ 64 - 75 lb/ft ³

10. STABILITY AND REACTIVITY

Chemical stability	Stable at normal conditions.
Conditions to avoid	Avoid dust formation. High temperatures.
Materials to avoid	Oxidizing agents. Acids.
Hazardous decomposition products	Phosphorus oxides. Sulphur oxides.

Hazardous polymerisation Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity Dust may irritate the respiratory tract, skin and eyes. High concentration: May cause irritation of nose, throat and mucous membranes. Large quantities: Ingestion may cause dizziness, nausea and vomiting.

Routes of exposure Inhalation. Skin contact. Eye contact. Ingestion.

Chronic toxicity Absorbed fluoride can cause metabolic imbalances with irregular heartbeat, nausea, dizziness, vomiting and seizures. Prolonged overexposure to fluorides may increase fluoride content of bones and teeth, and may result in fluorosis, and brittleness of bones. May cause allergic skin disorders in sensitive individuals.

Carcinogenicity No data available.

Mutagenicity Not available.

Teratogenicity No data available.

Reproductivity No data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data available.

Mobility The product is insoluble in water and will spread on the water surface.

Bioaccumulation No data available.

Environmental effects Fertilisers, particularly those containing nitrogen and/or phosphorus, can stimulate weed and algal growth in static surface waters. Nitrogen fertilisers may contain or form nitrate which can contaminate surface and ground-water. High nitrate concentrations may render the water unsuitable for human and livestock consumption.

13. DISPOSAL CONSIDERATIONS

Disposal instructions Collect without generating dust. Place in clean, sealed containers and dispose of in approved landfill.

Waste from residues / unused products Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

ADG

The product is not covered by international regulation on the transport of dangerous goods.

IATA

The product is not covered by international regulation on the transport of dangerous goods.

IMDG

The product is not covered by international regulation on the transport of dangerous goods.

Hazchem Code None

15. REGULATORY INFORMATION

National regulations This Material Safety Data Sheet was prepared in accordance with the Australia National Code of Practice for the Preparation of Material Safety Data Sheets (NOHSC: 2011.)

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

16. OTHER INFORMATION

Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided herein with respect to any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product specifically should advise all of their employees, agents, contractors and customers who will use the product of this (M)SDS.

Issue date

21-December-2009

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12-February-2013