

Safety Data Sheet



Product Name: Colluli SOP-M – Standard

1. IDENTIFICATION

Supplier Name	Danakali Limited
Address	31 Ventnor Avenue, WEST PERTH, WA 6005, Australia
Web Address	www.danakali.com
Telephone	+61 8 6315 1444
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Emergency	+61 8 6315 1444
Product Name	Colluli SOP-M – Standard
Product Description	Potassium magnesium sulphate produced from natural kainite and sylvite evaporite deposits.
Other Names	Leonite, sulphate of potash - magnesium
Use(s)	Fertiliser
SDS Date	20 November 2015

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF THE GLOBALLY HARMONISED SYSTEM

Signal word: None
Symbols: None

HAZARD STATEMENTS

None

PRECAUTIONARY STATEMENTS

P301+P312 IF SWALLOWED: Rinse mouth. Call a POISON CENTRE or Doctor if you feel unwell

NOT CLASSIFIED DANGEROUS GOODS BY THE CRITERIA OF THE ADG CODE

UN No	None Allocated	DG Class	None Allocated
Subsidiary Risk	None Allocated	Packing Group	None Allocated
HAZCHEM Code	None Allocated	IMO MARPOL V	Not HME

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	FORMULA	CAS No.	CONTENT
Potassium Magnesium Sulphate	$K_2Mg(SO_4)_2 \cdot 4H_2O$	15226-80-9	>98%
Other salts non hazardous	Various		<2%

4. FIRST AID MEASURES

Inhalation If inhaled, remove from contaminated area. To protect rescuer, use a particulate dust mask (Class P1 or P2). Apply artificial respiration if not breathing or asthma like symptoms occur.

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Eyes	Hold eyelids apart and flush continuously with clean running water. Continue flushing until advised to stop by a qualified person (Doctor or Poisons Information Centre), or for at least 15 minutes.
Ingestion	If person is conscious, rinse mouth thoroughly with water and give water or milk to drink. Induce vomiting if a large amount has been swallowed. Seek advice from the Poisons Information Centre on 13 11 16 (Australia wide) or a Doctor if there is pain or difficulty with swallowing.
Skin	If contact with skin or hair occurs, remove contaminated clothing and flush hair or skin with clean running water and soap. If skin irritation or rash occurs seek medical attention.
First Aid Facilities	Eye wash facilities and drinking water should be available.
Advice to Doctor	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammability	Non flammable.
Fire and Explosion	Non flammable and does not support combustion.
Extinguishing	As appropriate for primary fuel source, is not flammable and does not support combustion.
HAZCHEM Code	Not assigned.

6. ACCIDENTAL RELEASE MEASURES

Spillage	Handle with personal protective equipment (see Section 8). Clear area of all unprotected personnel. Avoid generating dust. Collect material for re-use or disposal.
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7. STORAGE AND HANDLING

Storage	Store in sealed containers to limit exposure to air and moisture which will cause the material to agglomerate. Store away from foodstuffs. Incompatible with aluminium and magnesium alloys.
Handling	Carefully read the product label before handling. Use safe handling practices to minimise risk of eye or skin contact and inhalation of dust. Wear protective gloves, eye protection (safety glasses) and a particulate dust mask (Class P1 or P2) at high dust levels when handling large amounts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Standards

Ingredient	Reference	TWA	STEL
Nuisance dust	Safe Work Australia Hazardous Substances Information System	10 mg/m ³	None

No specific dust exposure limits are set. The ACGIH/Safework Australia TWA for general inhalable dust is 10 mg/m³.

Biological Limits

There are no biological limits allocated.

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Engineering Controls

Use in ventilated areas, avoid high dust concentrations.

Personal Protective Equipment (PPE)

Wear protective gloves, eye protection (safety glasses) and a particulate dust mask (Class P1 or P2) at high dust levels when handling large amounts.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White crystalline granules
Odour	Odourless
pH	6 to 7
Vapour Pressure	Negligible
Vapour Density	Not applicable
Boiling Point	Not available
Melting Point	Not available
Solubility in Water	Soluble (31 g/100 mL at 25°C)
Specific Gravity	2.2
Bulk Density	Approximately 1.3 to 1.5 tonnes/m ³
Particle Size	0.5 to 2 mm
Flammability	Not flammable
Flash Point	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability Stable under recommended storage conditions (sealed containers), at ambient temperatures. Polymerisation will not occur. As it is a soluble salt, it is mildly corrosive to metals in the presence of moisture.

Conditions to Avoid High temperatures and open flames.

Incompatible Materials

Incompatible with aluminium and magnesium metal – explosion risk at high temperatures.

Hazardous Decomposition Products

May evolve toxic fumes or gases (sulphur dioxide/sulphur trioxide) upon heating to decomposition.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary

Product has a low toxicity. No eye, skin, carcinogenicity, mutagenicity, target organ or developmental toxicity data was found for potassium magnesium sulphate. General statements below are based on information for potassium/magnesium sulphate. Use normal safe work practices to avoid excessive eye or skin contact and dust inhalation. Product is non-toxic when ingested in small quantities. Ingestion of large quantities may cause gastrointestinal irritation and vomiting.

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Eye	May cause eye irritation, discomfort and redness.
Inhalation	Prolonged inhalation of high dust concentrations of airborne dust may cause irritation to the nose, throat and upper respiratory tract.
Skin	Low irritant, prolonged or repeated contact may result in mild irritation or rash (dermatitis) from the drying effect of the material on the skin.
Ingestion	Low acute toxicity. Ingestion of large quantities may result in nausea, vomiting and gastrointestinal irritation. Lower doses will likely irritate the mouth, oesophagus and stomach. Sulphate salts have a purgative effect (diarrhoea).
Toxicity Data	Potassium Magnesium Sulphate (15226-80-9), no toxicity data was available. Related compounds and their toxicity are: Potassium Sulphate (7778-80-5): LD ₅₀ (ingestion): 6,600 mg/kg (rat) TDL ₀ (ingestion): 750 mg/kg (woman) Magnesium Sulphate Heptahydrate (10034-99-8): TDL ₀ (ingestion): 351 mg/kg (woman)

12. ECOLOGICAL INFORMATION

Ecotoxicity	The material is a naturally occurring salt and not expected to cause any adverse effects to animals or plant life if released in controlled quantities such that general salinity is not affected in the area.
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13. DISPOSAL CONSIDERATIONS

Waste Disposal	Dispose of contents to an approved waste disposal facility if required.
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14. TRANSPORT INFORMATION

ADG/IMDG Dangerous Goods Classification:	Not a Dangerous Good
UN Number	None Allocated
UN Proper Shipping Name	None Allocated
Class and Subsidiary Risk	None Allocated
Packing Group	None Allocated
Hazchem Code	None Allocated
IMO MARPOL V	Not classified by health or HME (Harmful Marine Environment) criteria.

15. REGULATORY INFORMATION

Poison Schedule	Not scheduled in Australia using the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).
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16. OTHER INFORMATION

Abbreviations

ACGIH	American Conference of Government and Industrial Hygienists
ADG	Australian Dangerous Goods Code
BEI	Biological Exposure Index
CAS No	Chemical Abstracts Service number to uniquely identify chemical compounds
EC ₅₀	Effect concentration required for 50% of the members of the test population
GHS	Globally Harmonized System for the Classification and Labelling of Chemicals
LD ₅₀	Lethal dose required to kill 50% of the members of a test population after a specific time period
LDL ₀	Lowest dose causing lethality
TDL ₀	Lowest dose causing a toxic effect
LC ₅₀	Lethal concentration required to kill 50% of the members of a test population after a specific time period after exposure
NOEC	No observable effect concentration (chronic toxicity)
NIOSH	National Institute of Occupational Safety and Health (United States)
mg/L	milligrams per litre
mg/m ³	milligrams per cubic metre.
RTECS	Registry of Toxic Effects of Chemical Substances (NIOSH)
TWA	Time weighted average
STEL	Short term exposure limit

Reference

This document was prepared in accordance with the code of practice for the Preparation of Safety Data Sheets for Hazardous Chemicals published by SafeWork Australia 2011. MBS Environmental considers that the information in this Safety Data Sheet is accurate based on information supplied, however makes no express or implied warranty as to the accuracy of such information and expressly disclaims any liability resulting from reliance on such information.

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