SAFETY DATA SHEET

1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No.	:	N 10629
Product Name	:	Nickel sulphate

Manufacturer / supplier identification

Company	:	NICE Chemicals (P) Ltd. , Cochin , India Tel - 0484 2800212 , 2802755
Contact For Information	:	Tel . No. – 0484 2802536 Fax : 0484 2802483
Emergency Telephone No.	:	0484 2801583 Telefax No. : 0484 2802483

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2. COMPOSITION / INFORMATION ON INGREDIENTS

EC-No.	:	232-104-9	Molar Mass	:262.86
CAS-No	:	10101-97-0	Molecular Formula:	NiO_4S*6H_2O

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3. HAZARDS IDENTIFICATION : Harmful if swallowed. Possible risks of irreversible effects. May cause sensitisation by inhalation and skin contact.

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4. FIRST AID MEASURES : After inhalation: fresh air. Summon doctor.
After skin contact: wash off with plenty of water. Remove contaminated clothing.
After eye contact: rinse out with plenty of water with eyelids wide open. summon doctor.
After swallowing: make victim drink plenty of water. Induce vomiting. Summon doctor if feeling unwell.

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5. FIRE – FIGHTING MEASURES : Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood.
Special risks: Non combustible. Development of hazardous combustion gases or vapours possible in the event of fire. The following may develop in the event of fire: sulphur oxides.

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6. ACCIDENTAL RELEASE MEASURES : Procedures for cleaning / absorption:
Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

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7. HANDLING AND STORAGE : Handling: No further requirements

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Storage: Tightly closed. Dry. In a well ventilated place . Accessible only for authorised persons. Storage temperature: no restrictions.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Respiratory protection: required when dusts are generated.

Eye protection: required

Hand protection: required

Industrial hygiene: Change contaminated clothing. Application of skin protective barrier cream recommended. Wash hands after working with substance. Under no circumstances eat or drink at work place.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	solid
Colour	:	green
Odour	:	odourless
Melting temperature	:	not available
Boiling temperature	:	not available
PHvalue		
At 100g/l H_2O (20^0 C)	:	4.3-4.7
Flash point	:	not available
Explosion limits lower	:	not available
Upper	:	not available
Relative vapour density	:	Not available
Density (20^0 C)	:	2.07 g/cm^3
Solubility in		
water (20^0C)	:	625 g/l
water (100^0C)	:	3407 g/l

10. STABILITY AND REACTIVITY

: Conditions to be avoided: strong heating

Substance to be avoided: strong acids.

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Hazardous decomposition products: in the event of fire: toxic vapours (sulphur oxides)
Further information: releasing water of crystallization when heated.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD_{50}(oral, rat):264 mg/kg
Subacute to chronic toxicity:
The carcinogenic potential requires further clarification.
Further toxicological information:
After inhalation: irritation symptoms in the respiratory tract.
After skin contact: sensitisation with allergic manifestationsin predisposed persons.
After eye contact: severe irritations.

After swallowing: gastrointestinal complaints, irritations of mucous membrane in the mouth, pharynx, oesophagus .
The following applies to soluble nickel compounds in general: inorganic nickel has an adstringent effect onmucous membranes. Sensitization with allergic manifestations is possible in predisposed persons. In some cases nickel dermatitis may manifest itself. Depending on th ewater- solubility, nickel and its compounds display a more or less distinct carcinogenicity, with the readily soluble nickel compounds obviously entailing the lesser risk.

12. ECOLOGICAL INFORMATION

Ecotoxic effects:

Biologic effects: High aquatic toxicity.
The following applies to nickel salts in general: biological effects: dissolved Ni toxic for aquatic for aquatic organisms. Fish: L.idus LC_{50}: 570 mg/l; lethal concentration for fish 1 mg/l in soft water; in hard water P.promelas LD_{50}:27 mg/l; bacteria: Ps.puitda toxic as from 0.0025 mg/l up;

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Sc.quadricauda toxic as from 1.3 mg/lup; U. parduczi toxic from 0.042 mg/l up; arthropods: D. magna LC_{50}: 11 mg/l (all values referring to dissolved Ni).

Further ecologic data:

Do not allow to enter waters, waste water or soil.

13. DISPOSAL METHOD : Product : There are no uniform EC regulations for The disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations . We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste .

Packaging : Disposal in compliance with official Regulations. Handle contaminated packaging as In the same way as the substance itself . If not officially specified differently , non – contaminated packaging may be treated like household waste or recycled.

14. TRANSPORT INFORMATION : not subject to transport regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives

Symbol	:	Xn Harmful	
R- Phrases	:	22-40-42/43	Harmful if swallowed. Possible risks of irreversible effects. May cause sensitisation by inhalation and skin contact.
S-phrases	:	22-36/37	Do not breathe dust. Wear suitable protective clothing and gloves.
Water pollution class	:	2	(polluting substance)

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16. OTHER INFORMATION

Reason for alteration

General update.

Change in water pollution class.

The information contained here in is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.