SAFETY DATA SHEET  
Nickel Sulphate Hexahydrate

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name: Nickel Sulphate Hexahydrate  
Product No.: 369028, 3xp  
CAS-No.: 10101-97-0  
EU Index No.: 028-009-00-5  
EC No.: 232-104-9  
Identified uses: An additive for use in surface finishing.  
Company name: Nexchem Ltd  
Unit 1 Underwood Court  
Elm Tree Avenue  
Glenfield  
Leicester  
Leicestershire  
LE3 8SG  
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Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification (EC 1272/2008)  
Physical and Chemical Hazards: Not classified.  
Human health: Acute Tox. 4 - H302; Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Resp. Sens. 1 - H334; Skin Sens. 1 - H317; Muta. 2 - H341; Carc. 1A - H350i; Repr. 1A - H360D; STOT Rep. 1 - H372

Environment Aquatic: Acute 1 - H400; Aquatic Chronic 1 - H410

Classification (67/548/EEC) T; R48/23. Carc. Cat. 1; R49, Repr. Cat. 2; R61. Xn; R20/22. Muta. Cat. 3; R68. Xi; R38. N; R50/53. R42/43.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

EC No.: 232-104-9  
Label In Accordance With (EC) No. 1272/2008

Signal Word: Danger

[cont...]
Hazard Statements:

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H341 Suspected of causing genetic defects.
- H350i May cause cancer by inhalation.
- H360D May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

- P201 Obtain special instructions before use.
- P260a Do not breathe dust.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P273 Avoid release to the environment.
- P301+312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P342+311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Supplementary Precautionary Statements:

- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P285 In case of inadequate ventilation wear respiratory protection.
- P302+352 IF ON SKIN: Wash with plenty of soap and water.
- P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312 Call a POISON CENTER or doctor/physician if you feel unwell.
- P391 Collect spillage.
- P501a Dispose of contents/container in accordance with local, regional, national and/or international regulations

Supplemental label information:

- RCH002 Restricted to professional users.

Not Classified as PBT/vPvB by current EU criteria.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances:
- Product name: Nickel Sulphate Hexahydrate
- CAS-No.: 10101-97-0
- EU Index No.: 028-009-00-5
- EC No.: 232-104-9
4. FIRST AID MEASURES (SYMPTOMS)

Description of first aid measures

Inhalation: Move the exposed person to fresh air at once. Rinse nose and mouth with water. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention immediately!

Ingestion: Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Rinse nose, mouth and throat with water. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Get medical attention immediately!

Skin contact: Remove affected person from source of contamination. Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.

Eye contact: Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes and get medical attention.

Most important symptoms and effects, both acute and delayed

General information: Known or suspected carcinogen for humans. Known or suspected mutagen. Possible reproductive impact. See section 11 for additional information on health hazards.

Inhalation: May cause an asthma-like shortness of breath.

Skin contact: May cause an allergic skin reaction.

No specific first aid measures noted.

5. FIRE-FIGHTING MEASURES

Extinguishing media: The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials.

Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards: No unusual fire or explosion hazards noted.


Advice for fire-fighters

Special Fire Fighting Procedures: Avoid breathing fire vapours. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

Protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear protective clothing as described in Section 8 of this safety data sheet. Avoid inhalation of dust and contact with skin and eyes. In case of inadequate ventilation, use respiratory protection.

Environmental precautions
Do not allow to enter drains, sewers or watercourses. Avoid release to the environment. Environmental manager must be informed of all major spillages.

Methods and material for containment and cleaning up
Wear necessary protective equipment. Avoid inhalation of dust and contact with skin and eyes. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Do not contaminate water sources or sewer. Inform Authorities if large amounts are involved.

Reference to other sections
Wear protective clothing as described in Section 8 of this safety data sheet. Collect & dispose of spillage as indicated in section 13.

7. HANDLING AND STORAGE

Precautions for safe handling
Do not handle broken packages without protective equipment. Avoid inhalation of dust and contact with skin and eyes. Use mechanical ventilation in case of handling which causes formation of dust. Avoid eating, drinking and smoking when using the product. Observe good chemical hygiene practices.

Conditions for safe storage, including any incompatibilities
Store in tightly closed original container in a dry, cool and well-ventilated place. Keep separate from food, feedstuffs, fertilisers and other sensitive material.
Storage Class.
Chemical storage.

Specific end use(s)
The identified uses for this product are detailed in Section 1.2.
Min. Storage Temp (°C): 5
Max. Storage Temp (°C): 40

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters
| Name: Nickel Sulphate Hexahydrate | STD: WEL | TWA - 8 Hrs.: 0,1 mg/m^3 | STEL - 15 Min: | Notes: Carc, Sk, as Ni |

WEL= Workplace Exposure Limit.
Carc= Capable of causing cancer and/or heritable genetic damage.
Sk= Can be absorbed through skin.
Exposure controls
Protective equipment

Engineering measures: Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of dust. All handling to take place in well-ventilated area.

Respiratory equipment: If ventilation is insufficient, suitable respiratory protection must be provided. Use high efficiency particulate respirator with appropriate filter. Dust-filter P3 (for especially fine dust/powder).
Seek advice from supervisor on the companies’ respiratory protection standards.

Hand protection: Protective gloves must be used if there is a risk of direct contact or splash. Neoprene or PVC gloves are recommended. Seek advice from local supervisor.

Eye protection: Wear dust resistant safety goggles where there is danger of eye contact.

Other Protection: Provide eyewash station and safety shower. Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures: Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove non-impervious clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties. Eating, smoking and water fountains prohibited in immediate work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties
Appearance: Crystals.
Colour: Green.
Odour: Odourless.
Solubility: Soluble in water.
pH-Value, Diluted Solution: ~ 4.0 @ 10%

Other information: Volatile Organic Compound (VOC) 0.0%

10. STABILITY AND REACTIVITY

Reactivity: Stable under normal temperature conditions and recommended use.
Chemical stability: Stable under normal temperature conditions and recommended use.
Possibility of hazardous reactions: Hazardous Polymerisation Will not polymerise.
Conditions to avoid: No specific conditions are likely to result in a hazardous situation.
Incompatible materials: Materials To Avoid: Strong acids. Strong oxidising substances.

Hazardous decomposition products: None under normal conditions.

[cont...]
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Toxic Dose 1 - LD 50</th>
<th>275 (as hydrate) mg/kg (oral rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Health Effects:</td>
<td>May cause cancer by inhalation. Suspected of causing genetic defects. May damage the unborn child. Causes damage to organs.</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>Skin contact:</td>
<td>Causes skin irritation. May cause an allergic skin reaction. Prolonged or repeated exposure may cause severe irritation.</td>
</tr>
<tr>
<td>Eye contact:</td>
<td>Particles in the eyes may cause irritation and smarting. May cause temporary eye irritation.</td>
</tr>
<tr>
<td>Medical Considerations:</td>
<td>Skin disorders and allergies. Chronic respiratory and obstructive airway diseases. The product contains a sensitising substance which may provoke an allergic reaction among sensitive individuals.</td>
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<tr>
<td>Specific effects:</td>
<td>Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.</td>
</tr>
</tbody>
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12. ECOLOGICAL INFORMATION

| Ecotoxicity: | Very toxic to aquatic life with long lasting effects. |
| Toxicity: | Acute Fish Toxicity |
| Persistence and degradability: | Biodegradation |
| | Not Applicable - Inorganic chemical. |
| Bioaccumulative potential: | Not determined. |
| Mobility in soil: | Not determined. |
| Results of PBT and vPvB assessment: | Not Classified as PBT/vPvB by current EU criteria. |
| Other adverse effects: | Not determined. |

13. DISPOSAL CONSIDERATIONS

| General information: | Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority. When handling waste, consideration should be made to the safety precautions applying to handling of the product. |
| Waste treatment methods: | Environmental manager must be informed of all major spillages. Recover and reclaim or recycle, if practical. Dispose of waste and residues in accordance with local authority requirements. |
14. TRANSPORT INFORMATION

UN number
UN No. (ADR/RID/ADN): UN3077
UN No. (IMDG): UN3077
UN No. (ICAO): UN3077

UN proper shipping name
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Nickel sulphate)

Transport hazard class(es):
ADR/RID/ADN Class: 9
ADR/RID/ADN Class: Class 9: Miscellaneous dangerous substances and articles.
IMDG Class: 9
ICAO Class/Division: 9

Transport Labels:

Packing group:
ADR/RID/ADN Packing group: III
IMDG Packing group: III
ICAO Packing group: III

Environmental hazards:
Environmentally Hazardous Substance/Marine Pollutant

Special precautions for user:
EMS F-A, S-F
Hazard No. (ADR) 90 Environmentally hazardous substance; miscellaneous dangerous substances.
Tunnel Restriction Code (E)

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not relevant
15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments:

Guidance Notes:
Workplace Exposure Limits EH40.

EU Legislation:

Water hazard classification:
WGK 3

Note:
The regulatory information given above only indicates the principal regulations specifically Applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Hazard Statements in Full:

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H341 Suspected of causing genetic defects.
H350i May cause cancer by inhalation.
H360D May damage the unborn child.
H372 Causes damage to organs <<Organs>> through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Legal disclaimer:
The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation. This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

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