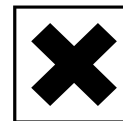


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N : Dangerous for the environment



Xn : Harmful

### 1. Identification of the product and the company

Identification of the product : NICKEL SULPHATE

Company identification : A.M.P.E.R.E. INDUSTRIE  
5/7 RUE DE BRETAGNE  
Z.I. DES BETHUNES  
95310 SAINT OUEN L'AUMÔNE - FRANCE  
B 378 205 355 RCS PONTOISE  
Tél : +33 (0)1 34 32 38 00

e-mail : fds@ampere.com

Chemical formula : /

Recommended uses (in the absence of specific contrary regulations) : Industrial.

Emergency phone nr : N° ORFILA : +33 (0)1 45 42 59 59

### 2. Composition / information on ingredients

This product is considered to be hazardous.

Substance name	Contents	CAS No / EC No / Index No	Symbol(s)	R-Phrase(s)
<u>Nickel(II)sulphate hexahydrate</u>	: 100 %	10101-97-0 / 232-104-9 / -----	Xn N	22-40-42/43-50/53
Other information	: inorganic salt (NiSO <sub>4</sub> , 6H <sub>2</sub> O)			

### 3. Hazards identification

Risk Phrases : Carcinogenic (category 3).  
Harmful.  
Dangerous for the environment.  
Harmful if swallowed.  
Limited evidence of a carcinogenic effect.  
May cause sensitization by inhalation and skin contact.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

### 4. First aid measures

First aid : Seek medical attention if ill effect develops.

- Inhalation : Remove victim to fresh air. Assure fresh air breathing. If not breathing, give artificial respiration. Seek medical advice.

- Skin contact : Wash skin thoroughly with mild soap and water. Take off immediately all contaminated clothing. Wash clothing before re-using.

- Eye contact : With eye held open, thoroughly rinse immediately with plenty of water for at least 15 minutes. Seek medical attention if irritation develops.

- Ingestion : Rinse mouth. Obtain medical attention.

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### 5. Fire - fighting measures

- Flammable class : The product itself does not burn.
- Extinguishing media : Use extinguishing media appropriate for surrounding fire. ( Water spray. Carbon dioxide. Dry powder. ).
- Not to be used : Jet of water .
- Special exposure hazards : May release : Metal dust. Metal oxides. Sulphur oxides (SOx) .
- Protection against fire : Use self-contained breathing apparatus when in close proximity to fire. Full protective clothing.
- Special procedures : Water used to extinguish fire should not enter drainage systems, soil, or stretches of water. Neutralize with : Sodium hydroxide. Collect in suitable containers.

### 6. Accidental release measures

- Personal precautions : See Heading 7. See Heading 8.  
Avoid contact with skin and eyes. Avoid contaminating clothes with product. Avoid dust formation. Good ventilation of the workplace required.
- Environmental precautions : Do not pour into drains or waterways. Avoid dust formation.
- After spillage and/or leakage : Pick up mechanically. Collect in suitable containers. ( See Heading 13. ).

### 7. Handling and storage

- Technical protective measures : Both local exhaust and general room ventilation are usually required.
- Storage : Directive 96/82/EEC .  
Keep in original containers. Keep the container tightly closed in a dry, well-ventilated place. Cool area.  
Keep separate from acids.
- Handling : Directive 98/24/EEC .  
Avoid dust formation. Avoid contact with skin and eyes. If the limits at the workplace are exceeded and/or larger amounts are released (leakage, spilling, dust) the indicated respiratory protection should be used.

### 8. Exposure controls / personal protection

- Personal protection
- Respiratory protection : Respirator with P3 filter.
- Hand protection : Use neoprene or rubber gloves. PVC gloves.
- Skin protection : Wear proper protective equipment. ( Chemical industries ).
- Eye protection : Wear tight fitting safety glasses or facial screen.
- Occupational Exposure Limits : Observe national regulations.
- Exposure controls : Directive 98/24/EEC .  
Avoid contact with skin and eyes. Do not breathe dust. Avoid : All unnecessary exposure. Wear proper protective equipment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Take off immediately all contaminated clothing. Use good personal hygiene practices. ( Wash hands and other exposed areas with soap and water before leaving work. ). No eating, drinking, smoking, or snuffing tobacco at work. Keep away from food, drink and animal feeding stuffs. Keep working clothes separately.
- Environment : IPPC Directive .

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## 9. Physical and chemical properties

Physical state	: Crystals.
Colour	: Green.
Odour	: Odourless.
pH value	: No data available.
Melting point [°C]	: 53 (- Crystalline. ) 280 : --> NiSO4 848 : NiSO4 --> NiO + SO3
Boiling point [°C]	: No data available.
Vapour pressure	: No data available.
Relative vapour density (air=1)	: No data available.
Viscosity	: No data available.
Solubility in water	: 625 g/l.
Fat solubility	: No data available.
Flash point [°C]	: No data available.
Specific gravity	: 3.68 g/cm3
Flammability	: No data available.
Explosion limits	: No data available.
Log P octanol / water at 20°C	: No data available.
Evaporation rate (ether=1)	: No data available.
Others	: Oxidizing conditions : No data available.

## 10. Stability and reactivity

Materials to avoid	: Acids.
Conditions to avoid	: Avoid dust formation.
Hazardous decomposition products	: Metal oxides. Sulphur oxides (SOx) .

## 11. Toxicological information

Rat oral LD50 [mg/kg]	: 275
Subacute toxicity	: Carcinogenic (category 3).
Sensitization	: May cause sensitization by inhalation and skin contact. Exposure may produce an allergic reaction.
Reproductive toxicity	: No data available.

## 12. Ecological information

Ecological effects information	: EC50/48h/salmo gairdneri : 0.26 mg/l EC50/48h/Asellus aquaticus : 435 mg/l
Persistence and degradability	: Not readily biodegradable.
Bioaccumulative potential	: No data available.
Mobility	: No data available.

## 13. Disposal considerations

Disposal	: Directive 91/689/EEC . Code : 06 03 13 Product : This material and its container must be disposed of as hazardous waste. Dispose in a safe manner in accordance with local/national regulations. Uncleaned packaging : Completely empty contents of packing before discarding. When not empty, dispose of this container at hazardous or special waste collection
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### 13. Disposal considerations (continued)

point. Dispose in a safe manner in accordance with local/national regulations.

### 14. Transport information

Hazard Label(s)



- UN No. : 3077  
 - H.I. nr : 90  
 - ADR/RID : UN 3077 ; Packaging group : III ; Class : 9 ; Label : 9 ; Code : M7  
 Description of goods : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (NICKEL SULPHATE)  
 - IMDG : Not applicable.  
 - ICAO/IATA : UN 3077 ; Class : 9 ; Packaging group : III ; Label : 9  
 Proper shipping name : UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, NOS (NICKEL SULPHATE)

### 15. Regulatory information

EC Labelling : Directive 67/548/EEC , Directive 1999/45/EC :

Symbol(s)



Symbol(s) : Xn - Harmful.  
 N - Dangerous for the environment.  
 R Phrase(s) : R22 : Harmful if swallowed.  
 R40 : Limited evidence of a carcinogenic effect.  
 R42/43 : May cause sensitization by inhalation and skin contact.  
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 S Phrase(s) : S22 : Do not breathe dust.  
 S36/37 : Wear suitable protective clothing and gloves.  
 S60 : This material and its container must be disposed of as hazardous waste.  
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.  
 Labelling : Nickel sulphate .

### 16. Other information

Further information : None.

The contents and format of this SDS are in accordance with EEC Commission Directive 2001/58/EC.

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