Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. 

## MATERIAL SAFETY DATA SHEET

## NICKEL AMMONIUM SULPHATE

Hexahydrate 98%

Extra Pure

MSDS CAS: 7785-20-8

## **Section 1: Chemical Product and Company Identification**

**Section 1: Chemical Product** 

Product Name: NICKEL AMMONIUM SULPHATE Hexahydrate

CAS#: 7785-20-8

Synonym: Ammonium disulphatonickelote (II) hexahydrate;

Ammonium nickel sulphate hexahydrate; ammonium nickel (2+) salt (2:2:1), hexahydrate

Chemical Name: Not available.

Chemical Formula: Ni(NH4)2(SO4)2.6H2O

**Brand: OXFORD** 

### **Details Of The Supplier Of The Safety Data Sheet:**

Company identification: OXFORD LAB FINE CHEM LLP

Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,

Navghar, Vasai (East). Palghar - 401 210.

Mumbai, Maharashtra, INDIA.

Tel: 91-250-2390989

Tel/Fax: 91-250-2390032

## **Section 2: Composition and Information on Ingredients**

### **Composition:**

Name	CAS#	% by Weight
Nickel Ammonium Sulphate	7785-20-8	98%
Hexahydrate		

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. 

### **Section 3: Hazards Identification**

### **Emergency Overview**

WARNING! HARMFULIFSWALLOWED OR INHALED. CAUSES IRRIT ATION TO SKIN, EYES AND RESPIRATORYTRACT. MAYCAUSE ALLERGIC SKIN OR RESPIRATORYREACTION. CANCER HAZARD. CAN CAUSE CANCER. Risk of cancerdepends on duration and level of exposure.

### **SAF-T-DATA**<sup>(tm)</sup> Ratings (Provided here for your convenience)

**Health Rating: 3 - Severe (Cancer Causing)** 

Flammability Rating: 0 - None Reactivity Rating: 1 - Slight Contact Rating: 3 - Severe (Life)

Lab Protective Equip: GOGGLES & SHIELD; LAB COAT& APRON; VENT HOOD; PROPER GLOVES

**Storage Color Code: Green (General Storage)** 

------

#### **Potential Health Effects**

Inhalation: Causes irritation to the respiratory tract. Symptoms may include coughing, sore throat, and shortness of breath. Lung damage may result from a single high exposure or lower repeated exposures. Lung allergy occasionally occurs, with asthma type symptoms.

Ingestion: Toxic. Symptoms may include abdominal pain, diarrhea, nausea, and vomiting.

Absorption is poor, but should it occur, symptoms may include giddiness, capillary damage, myocardial weakness, central nervous system depression, and kidney and liver damage.

Skin Contact: Causes irritation. May cause skin allergy with itching, redness or rash. Some individuals may become sensitized to the substance and suffer "nickel itch", a form of dermatitis.

Eye Contact: Causes irritation, redness, and pain.

Chronic Exposure: Prolonged or repeated exposure to excessive concentrations may affect lungs, liver and kidneys. Chronic exposure to nickel and nickel compounds is associated with cancer.

Aggravation of Pre-existing Conditions: Persons with pre-existing skin disorders, impaired respiratory or pulmonary function, or with a history of asthma, allergies, or sensitization to nickel compounds may be at an increased risk upon exposure to this substance.

### **Section 4: First Aid Measures**

<u>Inhalation:</u> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

<u>Ingestion:</u> Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. 

## **Section 4: First Aid Measures (Continued)**

**Skin Contact:** Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**Eye Contact:** Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

## **Section 5: Fire and Explosion Data**

Fire: Not considered to be a fire hazard.

**Explosion:** Not considered to be an explosion hazard.

Fire Extinguishing Media: Use any means suitable for extinguishing surrounding fire.

**Special Information:** In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

## **Section 6: Accidental Release Measures**

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

## **Section 7: Handling and Storage**

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Areas in which exposure to nickel metal or soluble nickel compounds may occur should be identified by signs or appropriate means, and access to the area should be limited to authorized persons. Wear special protective equipment (Sec. 8) for maintenance break-in or where exposures may exceed established exposure levels. Wash hands, face, forearms and neck when exiting restricted areas. Shower, dispose of outer clothing, change to clean garments at the end of the day. Avoid cross-contamination of street clothes. Wash hands before eating and do not eat, drink, or smoke in workplace. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. 

## **Section 8: Exposure Controls/Personal Protection**

### **Airborne Exposure Limits:**

-OSHAPermissible Exposure Limit (PEL):

soluble Nickel compounds as Ni: 1 mg/m3 (TWA)

-ACGIH Threshold Limit Value (TLV):

soluble Nickel compounds as Ni: 0.1 mg/m3 (TWA), A4 - Not classifiable as a human carcinogen

### **Ventilation System:**

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

### <u>Personal Respirators (NIOSH Approved):</u>

If the exposure limit is exceeded and engineering controls are not feasible, a half facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. A full-face piece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the appropriate regulatory agency, or respirator supplier, whichever is lowest. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

#### **Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

### **Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

### **Other Control Measures:**

Eating, drinking, and smoking should not be permitted in areas where solids or liquids containing soluble nickel compounds are handled, processed, or stored. NIOSH recommends pre-placement and periodic medical exams, with maintaining of records for all employees exposed to nickel in the workplace.

### Section 9: Physical and Chemical Properties

: Solid

Appearance

Color : Green crystalline.

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



## Section 9: Physical and Chemical Properties (Continued)

Molecular Weight : 394.97 g/mol

**Solubility** : 10.4g/100cc in H2O @ 20C

Specific Gravity : 1.92

pH : 4.6 Aqueous solution: (0.1M) %

Volatiles by volume @ 21C (70F): 0

**Boiling Point** : No data available.

Melting Point : 85 - 89 °C

Vapor Density (Air=1) : No data available. Vapor Pressure (mm Hg) : No data available. Evaporation Rate (BuAc=1) : No data available.

## **Section 10: Stability and Reactivity Data**

**Stability:** Stable under ordinary conditions of use and storage.

### **Hazardous Decomposition Products:**

Emits toxic fumes of nickel, ammonia nitric oxides, and sulfur oxides when heated to decomposition.

Hazardous Polymerization: Will not occur.

**Incompatibilities:** Aluminum, magnesium, and strong acids.

**Conditions to Avoid: Incompatibles.** 

## **Section 11: Toxicological Information**

	D50: 400 mg/kg \Cance NTP C		
Ingredient	Known		IARCCategory
Nickel Ammonium Sulphate (7785-20-8)	No	Yes	1

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



## **Section 12: Ecological Information**

**Environmental Fate:** No information found.

**Environmental Toxicity:** No information found.

## **Section 13: Disposal Considerations**

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

### **Section 14: Transport Information**

Land transport (ADR-RID)

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN N° : 3077 H.I. nr : 90 ADR – Class : 9

**Labelling – Transport**: 9: Miscellaneous dangerous substances and articles.

9: Miscellaneous dangerous Substances and articles.

ADR – Group : III

Sea transport (IMDG) [English only]

**Proper shipping name**: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN  $N^{\circ}$  : 3077

IMO-IMDG -

Class or division : 9: Miscellaneous dangerous substances and articles.

(9: Miscellaneous dangerous substances and articles. )

IMO-IMDG -

Packing group : III

Air transport (ICAO-IATA) [English only]

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

UN  $N^{\circ}$  : 3077

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. Tel: +91 250 2390032 / 2390989 / 2390990 Email: sales@oxfordlabchem.com / info@oxfordlabchem.com

Web: www.oxfordlabchem.com



## **Section 14: Transport Information (Continued)**

IATA - Class or division : 9: Miscellaneous dangerous substances and articles.

(9: Miscellaneous

dangerous substances and articles.)

IATA - Packing group : III

# **Section 15: Other Regulatory Information**

	<b>TSCA</b>	EC	Japan	Australia
<b></b>	Yes	Yes	No	No
•		t 2\		
Cana	ıda			
Korea	DSL	ND	SL	Phil.
Yes	Yes	No	)	Yes
	SARA313-			
No	No	)	No	)
	_	ions - Par	rt 2∖	
CERC	CLA	261.33		8(d)
	Cana Korea Yes nternationa A302 RQ No ternationa -RCRA-	Yes  entory Status - ParCanada Korea DSL Yes Yes  nternational Regulation A302SARA313- RQ TP No No	Yes Yes  entory Status - Part 2\Canada Korea DSL ND Yes Yes No nternational Regulations - Part 1\ A302 SARA313 RQ TPQ No No  ternational Regulations - Part	Yes Yes No  entory Status - Part 2\Canada Korea DSL NDSL Yes Yes No  nternational Regulations - Part 1\ A302SARA313 RQ TPQ List Cheminal No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No SARA311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No

Reactivity: No (Mixture / Solid)

## **Section 16 - Additional Information**

**References**: Not available.

Regd Office: Unit no 12, 1st Floor, Neminath Industrial Estate No.6, Navghar, Vasai (East), Palghar - 410210. Maharashtra, INDIA. Tel: +91 250 2390032 / 2390989 / 2390990
Email: sales@oxfordlabchem.com /
info@oxfordlabchem.com
Web: www.oxfordlabchem.com



Other Special Considerations: Not available.

## Disclaimer:

The information contained herein in good faith but makes no representations as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Oxford Lab Fine Chem LLP makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Oxford Lab Fine Chem LLP will not be responsible for damages resulting from use of or reliance upon this information.