OTTO CHEMIE PVT LTD

201, 51-53 Maroo Bhavan, Kalbadevi, Mumbai – 400002, India. Tel : + 91 22 2207 0099 / 6638 2599 Email : info@ottokemi.com, Web : www.ottokemi.com -----ISO 9001: 2015------

MATERIAL SAFETY DATA SHEET

1.Identification 1.1GHS Product identifier Copper(II) nitrate hemi(pentahydrate), ACS reagent, 98% Code C 8912

2.Hazard identification 2.1Classification of the substance or mixture Oxidizing solids, Category 2 Acute toxicity - Oral, Category 4 Skin irritation, Category 2 Eye irritation, Category 2 2.2GHS label elements, including precautionary statements Pictogram(s) Signal word Danger Hazard statement(s) H272 May intensify fire; oxidizer H302 Harmful if swallowed H315 Causes skin irritation H319 Causes serious eye irritation Precautionary statement(s) P210 Keep away from heat, hot surfaces, sparks, open flames and Prevention other ignition sources. No smoking, P220 Keep away from clothing and other combustible materials. P280 Wear protective gloves/protective clothing/eye protection/face protection. P264 Wash ... thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P370+P378 In case of fire: Use ... to extinguish. Response P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor/\u2026if you feel unwell. P330 Rinse mouth. P302+P352 IF ON SKIN: Wash with plenty of water/... P321 Specific treatment (see ... on this label). P332+P313 If skin irritation occurs: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 If eye irritation persists: Get medical advice/attention. Storage none P501 Dispose of contents/container to ... Disposal 2.3Other hazards which do not result in classification none

3.Composition/information on ingredients

3.1Substances

-	Common names and synonyms	number	EC number	Concentration
dicopper,tetranitrate,pentahydrate	dicopper,tetranitrate,pentahydrate	19004- 19-4	none	100%

4.First-aid measures

4.1Description of necessary first-aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact Wash off with soap and plenty of water. Consult a physician. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. If swallowed Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. 4.2Most important symptoms/effects, acute and delayed no data available 4.3Indication of immediate medical attention and special treatment needed, if necessary no data available 5.Fire-fighting measures

5.1Extinguishing media Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2Specific hazards arising from the chemical

no data available

5.3Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6.Accidental release measures

6.1Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3Methods and materials for containment and cleaning up

Pick up and arrange disposal. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7.Handling and storage

7.1Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Avoid exposure - obtain special instructions before use.Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8.Exposure controls/personal protection

8.1Control parameters

Occupational Exposure limit values

no data available

Biological limit values

no data available

8.2Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. 8.3Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique(without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Respiratory protection

Wear dust mask when handling large quantities.

Thermal hazards

no data available

 9.Physical and chemical properties

 Physical state
 blue.

 Colour
 no data available

 Odour
 no data available

 Melting point/ freezing point
 114.5\u00baC (dec.)(lit.)

 Boiling point or initial boiling
 170\u00baC

 point and boiling range
 Flammability

 No data available
 No data available

Lower and upper explosion no data available limit / flammability limit Flash point 170\u00baC Auto-ignition temperature no data available Decomposition temperature no data available no data available pН Kinematic viscosity no data available Solubility no data available Partition coefficient nno data available octanol/water (log value) Vapour pressure 49.8mmHg at 25\u00b0C Density and/or relative 2.32 density Relative vapour density no data available Particle characteristics no data available 10.Stability and reactivity 10.1Reactivity no data available 10.2Chemical stability Stable under recommended storage conditions.

Stable under recommended storage com 10.3Possibility of hazardous reactions no data available 10.4Conditions to avoid no data available 10.5Incompatible materials no data available 10.6Hazardous decomposition products

no data available

11.Toxicological information Acute toxicity Oral: no data available Inhalation: no data available Dermal: no data available Skin corrosion/irritation no data available Serious eye damage/irritation no data available Respiratory or skin sensitization no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available STOT-single exposure no data available STOT-repeated exposure no data available Aspiration hazard no data available

12.Ecological information 12.1Toxicity Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available 12.2Persistence and degradability no data available 12.3Bioaccumulative potential no data available 12.4Mobility in soil no data available 12.5Other adverse effects no data available

13.Disposal considerations

13.1Disposal methods

Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

14.Transport information 14.1UN Number ADR/RID: UN3085 14.2UN Proper Shipping Name ADR/RID: OXIDIZING SOLID, COR IMDG: OXIDIZING SOLID, CORF	ROSIVE, N.O.S.	IA	ATA: UN3085						
IATA: OXIDIZING SOLID, CORR 14.3Transport hazard class(es)	OSIVE, N.O.S.								
ADR/RID: 5	IMDG: 5		IATA: 5						
14.4Packing group, if applicable									
ADR/RID: II	IMDG: II		IATA: II						
14.5Environmental hazards									
ADR/RID: no	IMDG: no		IATA: no						
14.6Special precautions for user			1						
no data available									
14.7Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code no data available									
no data avaliable		1							
15.Regulatory information									
15.1Safety, health and environmental regulations specific for the product in guestion									
Chemical name	Common names and sy		CAS number						
dicopper,tetranitrate,pentahydrate				none					
European Inventory of Existing Co	Not Listed.								
EC Inventory		S.C.	1 10	Not Listed.					
United States Toxic Substances Control Act (TSCA) Inventory				Not Listed.	19				
China Catalog of Hazardous chemicals 2015			Not Listed.						
New Zealand Inventory of Chemicals (NZIoC)			Listed.						
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.						
Vietnam National Chemical Inventory			Not Listed.	1					
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)				Not Listed.]				

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

