

# SAFETY DATA SHEET

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

NANO3D SYSTEMS LLC.

ADDRESS: 1110 NE Circle Blvd.,  
ATAMI/Bldg. 11, Corvallis, OR 97330

<https://nano3dsystems.com>

EMERGENCY NO. 1-800-424-9300 CHEMTREC

MATERIAL NAME: **PCB ELECTROLESS COPPER SOLUTION C**

REVISED: April 2016

## SECTION 2. HEALTH HAZARD INFORMATION

### GHS Classifications

H302 Acute toxicity Oral : Category 4

H316 Skin corrosion / Skin irritation : Category 3

H320 Serious eye damage / Eye irritation : Category 2B

### Pictograms or Hazard symbols



Warning: Harmful if swallowed.

Warning: Causes mild skin irritation and eye irritation.

### Precautionary Statement Prevention

P264 Wash thoroughly after handling.

P270 Do not eat, drink, or smoke when using this product.

P301 + P312 If swallowed, call a physician if you feel unwell.

P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes.

P330 Rinse mouth.

P332 + P313 If skin irritation occurs, get medical advice/attention.

P337 + P313 If eye irritation persists, get medical advice/attention.

P501 Dispose of contents/container in accordance with  
local/regional/national/international regulations.

## SECTION 3.COMPOSITION/INFORMATION ON INGREDIENTS

Material		Wt %
Hydrochloric Acid	CAS# 7647-01-0	1-5
Stannous Chloride	CAS# 7772-99-8	1-5
Water	CAS# 7732-18-5	90-98
Total		100

## SECTION 4. FIRST AID MEASURES

## EFFECTS OF OVEREXPOSURE

### FIRST AID:

**Eye Contact:** Harmful to the naked eye; in case of contact flush eyes well for 15 minutes, lifting the lower and upper eyelids occasionally. May cause permanent eye damage. Seek medical attention.

**Skin Contact:** Obtain medical attention: Harmful to exposed skin. Flush skin well with water for 15 minutes, wash with soap and water. Remove affected clothing, get medical attention.

**Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. Seek medical attention. Inhalation of vapors may cause coughing, choking, inflammation of the nose, throat, and upper respiratory tract.

**Ingestion:** Will cause burns to the mouth and damage to the digestive tract. Get medical attention immediately. Do not induce vomiting; give large quantities of water.

## SECTION 5. FIRE FIGHTING MEASURES

Flash Point and Method non-flammable	Autoignition Temp. NA	Flammability Limits In Air	<u>LOWER</u> NA	<u>UPPER</u> NA
---	--------------------------	----------------------------	--------------------	--------------------

**Extinguishing media:** Water spray. Neutralize with soda ash or slaked lime.

**Special fire fighting procedures:** Wear chemically retardant gear and NIOSH approved self-contained breathing apparatus. Thermal decomposition produces irritating and toxic fumes. Extreme heat or contact with metals can release flammable hydrogen gas.

Toxic gases released: Hydrochloric acid, hydrogen.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**SPILLS, LEAKS:** Ventilate area of leak or spill. Stop leak if possible to do so without risk. Clean-up personnel should wear protective clothing and NIOSH approved respirator. Dike and cover the contaminated areas with absorbent, non-combustible material such as earth, sand, or vermiculite. Neutralize with alkaline material such as soda ash or lime. Do not use combustibles. Do not flush to sewer.

## SECTION 7. HANDLING AND STORAGE

Wash thoroughly after handling. Remove contaminated clothing and wash before re-use. Do not breathe mist or vapor. Do not expose eyes, skin, or clothing. Keep container closed tightly. Avoid contact with combustibles. Do not use with metal tools or items. Use with adequate ventilation or respiratory protection. Do not store near combustibles or in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances. Separate from metals, alkali, and organics. Residue in empty containers may still be hazardous.

## SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION

**Ventilation:** Where adequate ventilation is not available, use NIOSH approved vapor respirator complying with requirements of 29CFR 1910.134 with dust, fume and mist filters. Local ventilation through fume hoods or laminar flow stations is also preferred. Keep fumes away from strong bases and nitric acid fumes.

**Protective gloves:** Skin contact should be minimized through use of rubber gloves.

Other protective equipment: Steel tipped shoes/eye wash station/chemical safety chemical retardant clothing.  
Eye protection: Safety goggles / face shield

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form :**

Liquid

**Appearance :**

Colorless



## **SECTION 14. TRANSPORTATION INFORMATION**

DOT shipping Name: Non-regulated

## **SECTION 15. REGULATORY**

Symbol: C, Corrosive

R-Phrase: 20/21/22: Harmful by inhalation, in contact with skin and if swallowed.

S-Phrases: 23-36/37/39-45 Do not breathe vapor. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

The following component of this product is regulated as a toxic chemical under section 313 or Title III SARA, and 40CFR 372:

Hydrochloric Acid CAS# 7647-01-0

## **SECTION 16. OTHER INFORMATION**

NFPA Codes:

Health: 1

Flammability: 0

Reactivity: 0

Ingredients are TSCA listed.