

Science

# Honeywell

Wayne Community College  
3000 Wayne Memorial Dr  
GOLDSBORO NC 27534  
US

Performance Materials and  
Technologies  
115 Tabor Road  
Morris Plains, NJ 07950  
ATTN: SDS Coordinator

January 5, 2018

Dear Sir or Madam:

As a Responsible Care® company, Honeywell is focused on maintaining a high quality Product Stewardship program. To that end, our customers are sent Safety Data Sheets (SDSs) whenever:

- you purchase a product for the first time in a given calendar year,
- a SDS is significantly revised and/or updated
- the product contains a chemical(s) that is listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

**61194-100G                      Copper(II) nitrate trihydrate**

**Customer PO Number**

**DR5403565**

**Customer Material Number**

**61194-100G**

Enclosed are the current SDSs for Honeywell International Inc. products purchased by your company. It is imperative that you read and understand these SDSs, and that copies be permanently maintained on file at your facility. In addition, if you redistribute the products, these SDSs must also be provided to downstream employers receiving the products. If you or your department is not responsible for these files, please forward this information accordingly.

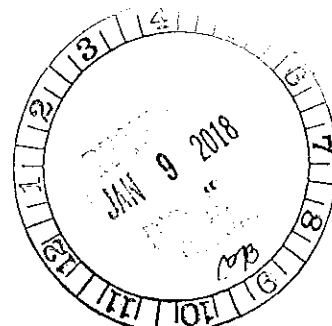
Should you have questions, or require any additional information about these products, please refer to Section 1 of the SDS for contact information.

Sincerely,

Honeywell Product Stewardship Global Operations

This letter was generated by electronic data processing and therefore has no signature.

Enclosure(s)



# SAFETY DATA SHEET

**Honeywell**  
**Fluka**

F61194 Copp.(II)nitrate-3H2O PPA,100KPF

**000000020736**

Version 1.0

Revision Date 06/13/2017

Print Date 01/04/2018

## SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Copper(II) nitrate trihydrate

Number : 000000020736

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171  
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414  
: Transportation (CHEMTREC): 1-800-424-9300 or  
+1-703-527-3887  
: (24 hours/day, 7 days/week)

## SECTION 2. HAZARDS IDENTIFICATION

### Emergency Overview

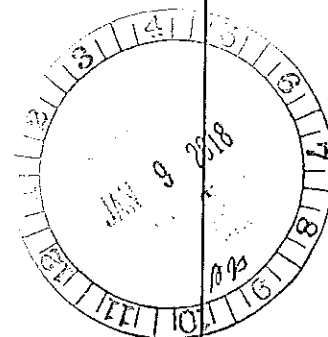
Form : solid

Color : blue green

Odor : odourless

### Classification of the substance or mixture

Classification of the substance or mixture : Oxidizing solids, Category 1  
Corrosive to metals, Category 1  
Skin corrosion, Category 1B  
Serious eye damage, Category 1



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## GHS Label elements, including precautionary statements

Symbol(s)



Signal word

: Danger

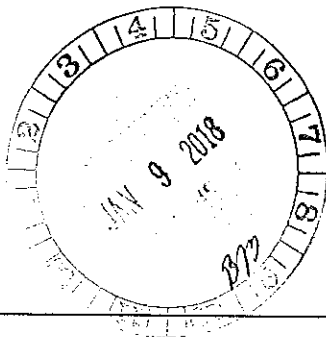
Hazard statements

: May cause fire or explosion; strong oxidizer.  
May be corrosive to metals.  
Causes severe skin burns and eye damage.

Precautionary statements

: **Prevention:**  
Keep away from heat.  
Keep/Store away from clothing/ combustible materials.  
Take any precaution to avoid mixing with combustibles.  
Keep only in original container.  
Do not breathe dust or mist.  
Wash skin thoroughly after handling.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
Wear fire/ flame resistant/ retardant clothing.**Response:**IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Immediately call a POISON CENTER/doctor.  
Wash contaminated clothing before reuse.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
Absorb spillage to prevent material damage.**Storage:**Store locked up.  
Store in corrosive resistant container with a resistant inner liner.**Disposal:**

Dispose of contents/ container to an approved waste disposal



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plant.

## Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Copper(II) nitrate-3-hydrate	10031-43-3	100.00 %

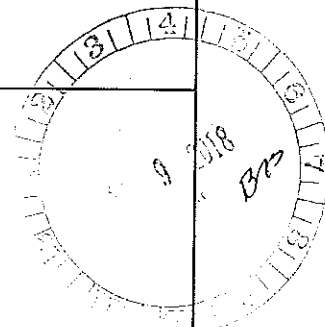
## SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area. First aider needs to protect himself. Show this safety data sheet to the doctor in attendance.
- Inhalation : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. Call a physician.
- Skin contact : After contact with skin, wash immediately with plenty of water. Call a physician.
- Eye contact : Protect unharmed eye. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.
- Ingestion : When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

## SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO2)  
Dry powder

Specific hazards during : Strong oxidizer. Contact with other material may cause fire.



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## firefighting

Keep away from reducing agents.  
In fires, the product supports combustion.  
In case of fire hazardous decomposition products may be produced such as:  
Copper oxides  
nitrogen oxides (NOx)

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear personal protective equipment.  
Evacuate personnel to safe areas.  
Ensure adequate ventilation.  
Avoid dust formation.  
Do not breathe dust.  
Do not get in eyes, on skin, or on clothing.

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.  
Do not allow run-off from fire fighting to enter drains or water courses.

Methods for cleaning up : Use mechanical handling equipment.  
Sweep up and shovel into suitable containers for disposal.  
Do not pick up with the help of saw-dust or other combustible substances.  
Dispose of in accordance with local regulations.

## SECTION 7. HANDLING AND STORAGE

### Handling

Handling : Wear personal protective equipment.  
Use only in well-ventilated areas.  
Avoid dust formation.  
Never return unused material to storage receptacle.  
Do not breathe dust.  
Do not get in eyes or mouth or on skin.

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Advice on protection against fire and explosion : Keep away from easily oxidizable materials.  
Keep away from combustible material.

## Storage

Requirements for storage areas and containers : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.  
Keep away from heat and sources of ignition.  
Do not store near combustible materials.  
Protect from physical damage.  
Store away from incompatible substances.

Further information on storage conditions : Protect from atmospheric moisture and water.

Advice on common storage : Keep away from reducing agents.  
Do not store with combustible materials.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Do not breathe dust.  
Do not get in eyes, on skin, or on clothing.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety goggles

Hand protection : Impervious gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Skin and body protection : Protective suit

Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measures : Keep working clothes separately.  
Separate rooms are required for washing, showering and changing clothes.  
When using, do not eat, drink or smoke.

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## Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
Copper(II) nitrate-3-hydrate	10031-43-3	TWA : Time weighted average	0.2 mg/m3	03 2014	ACGIH:US. ACGIH Threshold Limit Values
Further information	: Form of exposure : Fume. Expressed as : as Cu				

Copper(II) nitrate-3-hydrate	10031-43-3	TWA : Time weighted average	1 mg/m3	03 2014	ACGIH:US. ACGIH Threshold Limit Values
Further information	: Form of exposure : dust/mist Expressed as : as Cu				

Copper(II) nitrate-3-hydrate	10031-43-3	REL : Recommended exposure limit (REL):	1 mg/m3	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards
Further information	: Form of exposure : dust/mist Expressed as : as Cu				

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

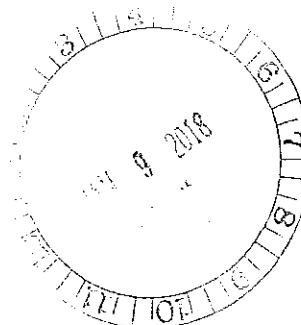
Color : blue green

Odor : odourless

pH : 3.5 - 4.5 at 50.00 g/l, 20 °C

Melting point (decomposition) : > 114 °C  
Note: Decomposition

Flash point : Note: Not applicable



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Flammability : The product is not flammable.

Lower explosion limit : Note: Not applicable

Upper explosion limit : Note: Not applicable

Vapor pressure : Note: no data available

Density : ca. 2.05 g/cm<sup>3</sup> at 20 °C

Water solubility : 1,300 g/l at 20 °C

Partition coefficient:  
n-octanol/water : Note: no data available

Ignition temperature : Note: Not applicable

Auto-ignition temperature : Note: not auto-flammable

Viscosity, dynamic : Note: Not applicable

Viscosity, kinematic : Note: Not applicable

Oxidizing properties : The substance or mixture is classified as oxidizing with the category 1.

Bulk density : ca. 1,600 kg/m<sup>3</sup>

Corrosivity : Note: Corrosive to metals

## SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.



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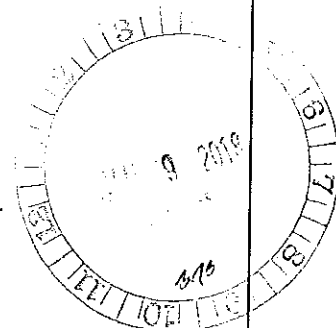
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- |                                    |   |
|------------------------------------|---|
| Possibility of hazardous reactions | : Hazardous polymerisation does not occur.<br>Corrosive in contact with metals  |
| Conditions to avoid                | : Keep away from heat and sources of ignition.<br>Keep away from reducing agents.<br>Avoid contact with combustible material (paper, wool, oil).<br>Avoid dust formation. |
| Incompatible materials to avoid    | : Potassium Ferrocyanide<br>Tin<br>Reducing agents<br>Combustible material<br>As oxidising agent, attacks organic substances such as wood, paper, fats.                   |
| Hazardous decomposition products   | : In case of fire hazardous decomposition products may be produced such as:<br>Copper oxides<br>nitrogen oxides (NOx)   |

## SECTION 11. TOXICOLOGICAL INFORMATION

- |                           |  |
|---------------------------|--|
| Acute oral toxicity       | : Note: no data available  |
| Acute inhalation toxicity | : Note: no data available  |
| Acute dermal toxicity     | : Note: no data available  |
| Skin irritation           | : Species: reconstructed human epidermis (RhE)<br>Result: Category 1B<br>Classification: Causes severe burns.<br>Method: OECD Test Guideline 431<br>Test substance: Copper(II) nitrate hydrate |
| Eye irritation            | : Result: Risk of serious damage to eyes.<br>Classification: Risk of serious damage to eyes.   |
| Sensitisation             | : Maximisation Test<br>Species: Guinea pig<br>Result: Did not cause sensitisation on laboratory animals.   |



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Classification: Does not cause skin sensitisation.  
Method: OECD Test Guideline 406

## SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity effects

Toxicity to fish : Note: no data available

Toxicity to daphnia and other aquatic invertebrates : Note: no data available

Toxicity to algae : Note: no data available

### Further information on ecology

Additional ecological information : Very toxic to aquatic life with long lasting effects.  
The methods for determining biodegradability are not applicable to inorganic substances.

## SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

## SECTION 14. TRANSPORT INFORMATION

<b>DOT</b>	UN/ID No.	: UN 3085
	Proper shipping name	: OXIDIZING SOLID, CORROSIVE, N.O.S. (Copper(II) nitrate-3-hydrate)
	Class	: 5.1
	Packing group	: I
	Hazard Labels	: 5.1 (8)

<b>IATA</b>	UN/ID No.	: UN 3085
	Description of the goods	: OXIDIZING SOLID, CORROSIVE, N.O.S. (Copper(II) nitrate-3-hydrate)
	Class	: 5.1

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Packaging group	:	I
Hazard Labels	:	5.1 (8)
Packing instruction (cargo aircraft)	:	561
Packing instruction (passenger aircraft)	:	557
IMDG UN/ID No.	:	UN 3085
Description of the goods	:	OXIDIZING SOLID, CORROSIVE, N.O.S. (COPPER(II) NITRATE-3-HYDRATE)
Class	:	5.1
Packaging group	:	I
Hazard Labels	:	5.1 (8)
EmS Number	:	F-A, S-Q
Marine pollutant	:	yes

## SECTION 15. REGULATORY INFORMATION

## Inventories

US. Toxic Substances Control Act	:	On TSCA Inventory
Australia. Industrial Chemical (Notification and Assessment) Act	:	On the inventory, or in compliance with the inventory
Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)	:	All components of this product are on the Canadian DSL
Japan. Kashin-Hou Law List	:	On the inventory, or in compliance with the inventory
Korea. Toxic Chemical Control Law (TCCL) List	:	On the inventory, or in compliance with the inventory
Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act	:	On the inventory, or in compliance with the inventory
China. Inventory of Existing Chemical Substances	:	On the inventory, or in compliance with the inventory
New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New	:	On the inventory, or in compliance with the inventory

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Zealand

## National regulatory information

- SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
- SARA 313 Components** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
: Copper(II) nitrate-3-hydrate 10031-43-3
- SARA 311/312 Hazards** : Reactivity Hazard  
Acute Health Hazard
- CERCLA Reportable Quantity** : 100 lbs
- California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

- Massachusetts RTK** : Copper(II) nitrate-3-hydrate 10031-43-3
- New Jersey RTK** : Copper(II) nitrate-3-hydrate 10031-43-3
- Pennsylvania RTK** : Copper(II) nitrate-3-hydrate 10031-43-3

## SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 3	3
Flammability	: 0	0
Physical Hazard	: 1	
Instability	:	0
Special hazard.	:	OX

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

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## Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group

