



The MSDS format adheres to the standards and regulatory requirements of the United States and may not meet regulatory requirements in other countries.

DuPont  
Material Safety Data Sheet

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MICROPLANAR(R) CMP3010(TM)  
EPM00083 Revised 12-DEC-2008  
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CHEMICAL PRODUCT/COMPANY IDENTIFICATION  
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Product Use

CMP

Company Identification

MANUFACTURER/DISTRIBUTOR

DuPont Air Products NanoMaterials L.L.C.  
2441 W.Erie Dr.  
Tempe  
AZ  
United States  
85282

PHONE NUMBERS

Product Information : (800)441-7515(outside U.S. 302-774-1000)  
Transport Emergency : (800)424-9300(outside U.S. 703-527-3887)  
Medical Emergency : (800)441-3637(outside U.S. 302-774-1000)

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COMPOSITION/INFORMATION ON INGREDIENTS  
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# Components

Material	CAS Number	%
*Ferric nitrate	10421-48-4	20-50
Deionized Water	7732-18-5	50-80

\* Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.

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HAZARDS IDENTIFICATION  
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# Emergency Overview

Reddish brown liquid with a slight acrid odor. Oxidizer.  
Contact with other material may cause fire. May be harmful if swallowed. Causes burns.

(HAZARDS IDENTIFICATION - Continued)

Potential Health Effects

INHALATION

May cause respiratory tract irritation.

EYE CONTACT

Causes burns.

SKIN CONTACT

Causes burns.

INGESTION

Large doses may cause gastrointestinal irritation with abdominal cramps, vomiting, and diarrhea.

TARGET ORGANS

Eyes, skin, gastrointestinal system, and respiratory tract.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Overexposure may aggravate existing cardiovascular or respiratory conditions, blood disorders, or dermatitis.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

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FIRST AID MEASURES  
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First Aid

INHALATION

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes, while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing before reuse.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

## (FIRST AID MEASURES - Continued)

If swallowed, do not induce vomiting. Immediately give 2 glasses of water. Never give anything by mouth to an unconscious person. Call a physician.

## Notes to Physicians

Treat symptomatically as required by the condition of the patient.

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FIRE FIGHTING MEASURES  
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## # Flammable Properties

Flash Point	: 0
Autoignition	: 0
Flammable limits in Air, % by Volume	
LEL	: 0
UEL	: 0

## Extinguishing Media

Water Spray, Water Fog.

## Fire Fighting Instructions

Do not use carbon dioxide or other gas-filled fire extinguishers. Flood with water or use a water fog.

## UNUSUAL FIRE AND EXPLOSION HAZARDS

Contact with reducing agents, wood, paper, or other combustibles can cause fire.

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ACCIDENTAL RELEASE MEASURES  
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## Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

## Initial Containment

Follow applicable Federal, State/Provincial and Local laws/regulations.

## Spill Clean Up

Soak up with sawdust, sand, oil dry or other absorbent material. Dispose of in an approved container. Comply with Federal, State, and local regulations for reporting releases.

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HANDLING AND STORAGE  
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## Handling (Personnel)

Avoid contact with eyes, skin or clothing. Use with sufficient ventilation to keep employee exposure below recommended limits. Wash thoroughly after handling. Wash clothing after use.

## Handling (Physical Aspects)

Keep container tightly closed.

## Storage

No special requirements.

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EXPOSURE CONTROLS/PERSONAL PROTECTION  
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## Engineering Controls

Use only with adequate ventilation.

## Personal Protective Equipment

## RESPIRATORY PROTECTION

No respiratory protection is normally required.

## PROTECTIVE CLOTHING

Prevent skin contact. Wear chemical resistant gloves.

## EYE/FACE PROTECTION

Use safety glasses or chemical goggles.

## Exposure Guidelines

## Exposure Limits

MICROPLANAR(R) CMP3010(TM)

PEL (OSHA) : None Established

TLV (ACGIH) : None Established

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PHYSICAL AND CHEMICAL PROPERTIES  
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## # Physical Data

Boiling Point : 224 F (107 C)  
Vapor Pressure : Not Available  
Vapor Density : Not Available  
Evaporation Rate : Not Available  
Solubility in Water : Completely soluble  
pH : <1  
Color : Reddish Brown.  
Specific Gravity : 1.1-1.6  
Form : Liquid.

## (PHYSICAL AND CHEMICAL PROPERTIES - Continued)

Odor : Acid.  
Odor :Slight nitric acid

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STABILITY AND REACTIVITY  
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## Chemical Stability

Stable at normal temperatures and storage conditions.

## # Conditions to Avoid

Heat, shock, friction, incompatibles.

## # Incompatibility with Other Materials

Incompatible or can react with reducing agents, most organic materials.

wood, paper, and other combustibles.

## # Decomposition

Hazardous gases or vapors can be released, including oxides of nitrogen.

None known.

## Polymerization

Hazardous polymerization will not occur.

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TOXICOLOGICAL INFORMATION  
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## Animal Data

Data for MicroPlanar(TM) CMP3010(TM)

## INHALATION

No information available.

## EYE CONTACT

No information available.

## SKIN CONTACT

LD50, rabbit: >2000 mg/kg, not harmful.  
Considered corrosive by in vitro assay results.

## INGESTION

LD50, rat: >2000 mg/kg not harmful. Causes irritation.

## GENOTOXICITY

## (TOXICOLOGICAL INFORMATION - Continued)

No information available.

## TARGET ORGANS

Eyes, skin, liver, kidneys, blood, gastrointestinal tract,  
and respiratory tract.

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ECOLOGICAL INFORMATION  
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## Ecotoxicological Information

No information is available.

## DATA FOR MICROPLANAR(TM) CMP3010(TM)

Not expected to be harmful to aquatic organisms if the pH is  
not significantly lowered.

## FATE

Freely soluble in water; may be oxidized to nitrite by  
bacteria in soil or water. Anaerobic bacteria may oxidize  
organic material by using nitrate as an oxygen source and  
produce nitrogen gas. In soil or water, may be taken  
up by plants or algae and used as a source of nitrogen.

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DISPOSAL CONSIDERATIONS  
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## Waste Disposal

Treatment, storage, transportation, and disposal must be in  
accordance with applicable Federal, State/Provincial, and Local  
regulations.

Incineration at a facility with proper Federal and State  
issued permits is the recommended method for disposal.

## Container Disposal

Observe all label warnings. Empty containers may contain  
hazardous residue. Refer to applicable Local, State/Provincial,  
and Federal Regulations, as well as industry Standards.

Do not distribute, make available, or reuse empty containers  
except for storage and shipment of original product. Remove  
all hazardous product residue, and puncture or otherwise  
destroy empty containers before disposal. Consult 40 CFR,  
Parts 261 and 268 for guidance on disposal.

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TRANSPORTATION INFORMATION  
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Shipping Information

DOT/IMO/IATA  
Proper Shipping Name : Corrosive Liquid, acidic, inorganic,  
N.O.S  
(Contains Ferric Nitrate and Nitric Acid)  
Hazard Class : 8  
UN No. : UN 3264  
Packing Group : II

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REGULATORY INFORMATION  
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U.S. Federal Regulations

This product complies with TSCA inventory reporting requirements.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 Hazard Categories: Acute

313: This product contains substance(s) which are subject to the report requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. See section Composition/Information on Ingredients.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION AND LIABILITY ACT)  
Not reportable.

We recommend you contact local authorities to determine if there may be other local reporting requirements.

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OTHER INFORMATION  
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NFPA, NPCA-HMIS

NFPA Rating  
Health : 2  
Flammability : 0  
Reactivity : 0  
  
Specific Hazard :Oxidizer

(Continued)

## Additional Information

Because the long-term human health effects from exposure to MICROPLANAR (R) CMP3010(TM) have not been fully evaluated, exposure should be kept to the lowest level possible.

This material is for industrial use. Use only under the supervision of a technically qualified individual.

MicroPlanar(R) is a registered trademark of EKC Technology, Inc. licensed to DuPont Air Products Nanomaterials L.L.C.

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The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsibility for MSDS : DuPont Air Products NanoMaterials, L.L.C  
Chelsea Beck  
Telephone : [602] 659-4360

# Indicates updated section.

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

End of MSDS