



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

Page 1

CR90X
EPM00197 Revised 30-JUN-2007

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Product Use

CMP

Tradenames and Synonyms

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)

COMPOSITION/INFORMATION ON INGREDIENTS

Components

Material	CAS Number	%
Alumina Powder	1344-28-1	~100

HAZARDS IDENTIFICATION

Emergency Overview

CAUTION

May cause eye and respiratory irritation.
Very fine white powder with no odor.

Potential Health Effects

INHALATION

Inhalation of dust may cause temporary lung irritation with cough, discomfort, difficulty breathing, or shortness of breath. Higher exposures may lead to chronic lung disorders with symptoms of lung insufficiency.

EYE CONTACT

May cause irritation.

(HAZARDS IDENTIFICATION - Continued)

SKIN CONTACT

May cause skin irritation with discomfort or rash. There reports of human sensitization.

INGESTION

May cause irritation.

TARGET ORGANS

Eyes and Respiratory tract

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Overexposure may aggravate existing respiratory conditions 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.

FIRST AID MEASURES

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 wash skin with soap and water. 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

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.

FIRE FIGHTING MEASURES

Flammable Properties

Flash Point : None
Autoignition : Not Available
Flammable limits in Air, % by Volume
LEL : Not Available
UEL : Not Available

Extinguishing Media

Water Spray, Foam, Dry Chemical, Carbon Dioxide.

Fire Fighting Instructions

Evacuate personnel to a safe area. Wear full protective equipment. Shut off source of fuel, if possible and without risk. Cool tank/container with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS.
No special precautions are necessary.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

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

Spill Clean Up

Shovel or sweep up. Comply with Federal, State, and local regulations for reporting releases. Dispose of in an approved container. Avoid causing dust.

HANDLING AND STORAGE

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

Store in a cool, dry, well-ventilated area. Store in original container.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use only with adequate ventilation.

Personal Protective Equipment

EYE/FACE PROTECTION: Wear safety glasses.

RESPIRATORS: Where there is potential for airborne exposures in excess of applicable limits, wear NIOSH approved respiratory protection.

SKIN PROTECTION: Wear protective gloves to minimize skin contamination. Wash hands and contaminated skin thoroughly after handling.

Exposure Guidelines

Applicable Exposure Limits

Alumina Powder		
PEL (OSHA)	:	15 mg/m ³ , total dust, 8 Hr. TWA 5 mg/m ³ , respirable dust, 8 Hr. TWA
TLV (ACGIH)	:	Notice of Intended Changes (2007) Withdraw Adopted Documentation and TLV; See NIC Entry for Aluminum Metal and Insoluble Compounds
AEL * (DuPont)	:	None Established

* AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Vapor Pressure	:	Not Available
Vapor Density	:	Not Available
Evaporation Rate	:	Not Available
Solubility in Water	:	Insoluble
Melting Point	:	>3632 F (>2000 C)
pH	:	Not Applicable
Odor	:	None.
Color	:	White.
Specific Gravity	:	Not Available
Form	:	Powder.

STABILITY AND REACTIVITY

Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

Humidity

Decomposition

None.

Polymerization

Will not normally occur.

TOXICOLOGICAL INFORMATION

Animal Data

Data for CR90

INHALATION

No information available.

EYE CONTACT

No information available.

SKIN CONTACT

No information available.

INGESTION

No information available.

GENOTOXICITY

No information available.

TARGET ORGANS

Eyes and Respiratory Tract

ECOLOGICAL INFORMATION

Ecotoxicological Information

No information is available.

Fate: Inert mineral product that is insoluble in water and settles.

DISPOSAL CONSIDERATIONS

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. Refer to applicable Local, State/Provincial, and Federal Regulations, as well as industry Standards.

Empty containers may contain residue. 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.

TRANSPORTATION INFORMATION

Shipping Information

DOT/IMO/IATA
Not Regulated.

REGULATORY INFORMATION

U.S. Federal Regulations

This product complies with TSCA inventory reporting requirements.

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

OTHER INFORMATION

NFPA, NPCA-HMIS

NFPA Rating	
Health	: 1
Flammability	: 0
Reactivity	: 0

(Continued)

Additional Information

Because the long term human health effects from exposure to CR90 have not been fully evaluated, exposure should be kept to the lowest level possible.

This material is for industrial use and should only be used under the supervision of a technically qualified individual.

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 AirProducts Nanomaterials L.L.C
MSDS Coordinator
Telephone : (757) 686-8663 OR (919) 248-5027

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