

MSDS Cover Sheet

mi[®] micromeritics[®]
 INSTRUMENT CORPORATION
 ONE MICROMERITICS DR.
 NORCROSS, GA 30093-1877 U.S.A.

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REV	REVISION DESCRIPTION	BY	DATE	CHK	REL. NO.		

REFERENCE MATERIAL
ACTIVE METAL DISPERSION 31%

SIZE	NUMBER	PAGE
A	004/16825/00MSDS	X of 6

Micromeritics Material Safety Data Sheet

Title : Reference Material Active Metal Dispersion 31%
Date of Preparation : 03/24/09

MSDS No. : 004/16825/00MSDS
Revision : C

Section 1 - Chemical Product and Company Identification

Product/Chemical Name: Engelhard Platinum on Alumina

Chemical Formula: N/A

CAS Number: n/a

Other Designations: Platinum on Alumina

General Use: N/A

Supplier: Micromeritics Instrument Corp.
1 Micromeritics Dr.
Norcross, GA 30093-1877 USA

Contact: Human Resources
Phone: (770) 662-3620
Fax: (770) 662-3696

Manufacturer: Engelhard, 101 Wood Avenue, Iselin, NJ 08830-0770, Phone (800)336-3559 or (800)321-2747

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt
Alumina	1344-28-1	99.5
Platinum	7440-06-4	0.5

Code: C3761 Prototype: 10166P 7/25/97

0.5% PLATINUM ON ALUMINA TABLETS, DRY, REDUCED

NOTE: The percentage by weight values reported for the ingredients in this product represent approximate formulation values.

Trace Impurities:

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Alumina	10 mg/m ³ Total 5 mg/m ³ Resp.	none estab.	10 mg/m ³	none estab.	none estab.	none estab.	none estab.
Platinum	1 mg/m ³	none estab.	1 mg/m ³	none estab.	none estab.	none estab.	none estab.

NOTE: See Section 8 for Exposure Limits and Section 11 for Toxicological Information.

Unless otherwise noted, all values are reported as 8-hour Time-Weighted Averages (TWAs) and total dust (particulates only). All ACGIH TLVs refer to the 1994-95 Standards. All OSHA PELs refer to 29 CFR Part 1910 Air Contaminants: Final Rule, January 19, 1989*

*NOTE: As a result of the July 7, 1992 decision by the U.S. Circuit Court of Appeals (AFL-CIO v. OSHA) to vacate the 1989 PELs, OSHA will no longer enforce these new limits and will return to the pre-1989 PELs. Engelhard, however, will continue to list the more protective 1989 levels.

Section 3 - Hazards Identification☆☆☆☆☆ **Emergency Overview** ☆☆☆☆☆**HMIS**

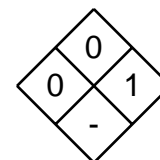
H 1

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PPE†

†Sec. 8

Potential Health Effects**Primary Entry Routes:** Eyes, inhalation.**Target Organs:** N/A**Acute Effects****Inhalation:** Inhalation may cause irritation of the respiratory tract.**Eye:** May cause mechanical irritation if exposed to large amounts of dust.**Skin:** No adverse effects expected.**Ingestion:** No adverse effects expected.**Carcinogenicity:** N/A**Medical Conditions Aggravated by Long-Term Exposure:** N/A**Chronic Effects:** N/A**Section 4 - First Aid Measures****Inhalation:** E18.Remove to fresh air.**Eye Contact:** E3.Flush eyes with plenty of water. If irritation develops, call a physician.**Skin Contact:** E14.Flush with plenty of water. If irritation persists, call a physician.**Ingestion:** E29.Procedures normally not needed. If large quantities are ingested, seek medical advice.**Note to Physicians:** N/A**Special Precautions/Procedures:** N/A**Section 5 - Fire-Fighting Measures****Flash Point:** N/A**Flash Point Method:** N/A**Burning Rate:** N/A**Autoignition Temperature:** N/A**LEL:** N/A**UEL:** N/A**Flammability Classification:** N/A**Extinguishing Media:** Use water, carbon dioxide or foam.**Unusual Fire or Explosion Hazards:** Not a fire or explosion hazard. However, contact with methanol or ethanol may cause a vigorous reaction, releasing flammable gases with a large amount of heat and a possible explosion.**Hazardous Combustion Products:** N/A**Fire-Fighting Instructions:** No special fire fighting procedures are needed for this product.**Fire-Fighting Equipment:** N/A**NFPA****Section 6 - Accidental Release Measures****Spill /Leak Procedures:** S44.Vacuum or scoop the spilled material into a container for reclamation or disposal. Avoid dusting.**Small Spills:** N/A**Large Spills****Containment:** N/A**Cleanup:** N/A**Regulatory Requirements:** N/A

Section 7 - Handling and Storage

Handling Precautions: C6.Avoid breathing dust. C8.Avoid contact with eyes. C16.Use with adequate ventilation.

Storage Requirements: D14.Store in a cool, dry location. D4.Keep container closed.

Regulatory Requirements: N/A

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: N/A

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within their PELs or TLVs during the use of this product.

Administrative Controls: N/A

Respiratory Protection: Use NIOSH - approved dust mask if exposure exceeds TLV.

Protective Clothing/Equipment: Eye Protection: Safety glasses (with side shields).

Safety Stations: N/A

Contaminated Equipment: N/A

Comments: N/A

Section 9 - Physical and Chemical Properties

Physical State: N/A

Appearance and Odor: Grey to black powder.

Odorless

Odor Threshold: N/A

Vapor Pressure: 1 mmHg at 2158°C)

Vapor Density (Air=1): N/A

Formula Weight: N/A

Density: N/A

Specific Gravity (H₂O=1): 4.0

pH: N/A

Water Solubility: Insoluble

Other Solubilities: N/A

Boiling Point: 3147°C

Freezing/Melting Point: 2072°C

Viscosity: N/A

Refractive Index: N/A

Surface Tension: N/A

% Volatile: N/A

Evaporation Rate: N/A

Section 10 - Stability and Reactivity

Stability: N/A

Polymerization: N/A

Chemical Incompatibilities: Will undergo an exothermic hydration reaction with water which may produce significant amounts of heat depending on the amount of water and alumina.

Conditions to Avoid: Methanol and ethanol

Hazardous Decomposition Products: May react vigorously with methanol or ethanol, relapsing flammable gases.

Section 11- Toxicological Information

Toxicity Data:*

A55. May cause eye and respiratory tract irritation.

A163. For industrial use only.

A164. Read current Material Safety Data Sheet

Eye Effects: N/A

Skin Effects: N/A

Acute Inhalation Effects: N/A

Acute Oral Effects: N/A

Chronic Effects: N/A

Carcinogenicity: N/A

Mutagenicity: N/A

Teratogenicity: N/A

* See NIOSH, RTECS (????0000), for additional toxicity data.

Section 12 - Ecological Information

Ecotoxicity: N/A
Environmental Fate: N/A
Environmental Degradation: N/A
Soil Absorption/Mobility: N/A

Section 13 - Disposal Considerations

Disposal: N/A
Disposal Regulatory Requirements: US EPA Waste Number: Not regulated.
 Federal, state and local disposal laws and regulations will determine the proper waste disposal / recycling / reclamation procedure. All waste materials should be reviewed to determine the applicable hazards (testing may be necessary). Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected.
****NOTE**** Chemical additions, processing or otherwise altering this material may make the waste management information presented above incomplete, inaccurate or otherwise inappropriate.
 As local regulations may vary; all waste must be disposed/recycled/reclaimed in accordance with federal, state, and local environmental control regulations.
Container Cleaning and Disposal: N/A

Section 14 - Transport Information

DOT Transportation Data (49 CFR 172.101):

Shipping Name: N/A	Packaging Authorizations	Quantity Limitations
Shipping Symbols: N/A	a) Exceptions: N/A	a) Passenger, Aircraft, or Railcar: N/A
Hazard Class: N/A	b) Non-bulk Packaging: N/A	b) Cargo Aircraft Only: N/A
ID No.: N/A	c) Bulk Packaging: N/A	Vessel Stowage Requirements
Packing Group: N/A		a) Vessel Stowage: N/A
Label: N/A		b) Other: N/A
Special Provisions (172.102): N/A		

Section 15 - Regulatory Information

US Federal Regulations
TSCA: In TSCA
SARA 311 and 312 Hazard Categories
 IMMEDIATE (Acute) Health Hazard: YES
 DELAYED (Chronic) Health Hazard: NO
 FIRE Hazard: NO
 REACTIVITY Hazard: NO
 Sudden Release of PRESSURE: NO
SARA SECTION 313 NOTIFICATION
 This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.
OZONE DEPLETING SUBSTANCES (ODS)
 This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clear Air Act Amendments 1990 and CFR Part 82.
VOLATILE ORGANIC COMPOUNDS (VOC)
 None
EPA Regulations: N/A
OSHA Regulations: N/A
State Regulations:
 VOLATILE ORGANIC COMPOUNDS (CARB): None
Canadian Regulations:
 DSL/NDSL: Not determined.
 WHMIS Classification: Not determined.
European Regulations:
 EINECS: Not determined.

Other Regulations:

MITI: Not determined.

AICS: Not determined.

UN Number: Not Regulated

DOT: Not Regulated

Section 16 - Other Information**Prepared By:** ADG**Revision Notes:** N/A**Additional Hazard Rating Systems:** N/A

Disclaimer: The information in this Material Safety Data Sheet should be provided to all who will use, handle, store, transport, or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, and management and for persons working with or handling this product. The information presented in the MSDS is premised upon proper handling and anticipate uses and is for the material without chemical additions/alterations. We believe this information to be reliable and up-to-date as of the date of publication, but make no warranty that it is. Additionally, if this Material Safety Data Sheet is more than three years old, please contact the supplier at the phone number listed in Section 1 to make certain that this sheet is current. Copyright Engelhard Corporation. License granted to make unlimited copies for internal use only. End of MSDS.