

METCO INC, SUB OF THE PERKIN-ELMER CORP -- 203-NS YTTRIA STABILIZED ZIRCONIA POWDER  
-- 3439-01-382-0967

===== Product Identification =====

Product ID:203-NS YTTRIA STABILIZED ZIRCONIA POWDER  
MSDS Date:07/19/1991  
FSC:3439  
NIIN:01-382-0967  
MSDS Number: BYRWW  
=== Responsible Party ===  
Company Name:METCO INC, SUB OF THE PERKIN-ELMER CORP  
Address:1101 PROSPECT AVENUE  
Box:1006  
City:WESTBURY  
State:NY  
ZI  
P:11590-0201  
Country:US  
Info Phone Num:516-334-1300  
Emergency Phone Num:800-424-9300(CHEMTREC)  
CAGE:39918

=== Contractor Identification ===  
Company Name:METCO INC, SUB OF THE PERKIN-ELMER CORP  
Address:1101 PROSPECT AVENUE  
Box:City:WESTBURY  
State:NY  
ZIP:11590-2724  
Country:US  
Phone:516-334-1300  
CAGE:39918

===== Composition/Information on Ingredients =====

Ingred Name:ZIRCONIUM  
CAS:7440-67-7  
RTECS #:ZH7070000  
Fraction by Wt: 92%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:5 MG/M3

ACGIH TLV:5 MG/M3/10 STEL;9495

Ingred Name:YTTRIUM

CAS:7440-65-5

RTECS #:ZG2980000

Fraction by Wt: 8%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9495

Ingred Name:ORGANIC BINDER

Other REC Limits:NONE RECOMMENDED

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===== Hazards Identification =====

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:INHALATION MAY CAUSE RESPIRATORY TRACT  
IRR

ITATION. SKIN AND EYE CONTACT MAY CAUSE IRRITATION; DERMATITIS.

INGESTION-NO DATA GIVEN. YTTRIUM MAY BE TOXIC TO LIVER AND BLOOD  
CLOTTING MECHANISM. TARGET OR GANS: LUNGS, BLOOD FORMING ORGANS,  
SKIN, EYES.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%  
OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Effects of Overexposure:INHALED-IRRITATION. SKIN-IRRITATION.  
EYES-IRRITATION.

Medical Cond Aggravated by Exposure:CONSULT A PHYSICIAN.

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===== First Aid Measures =====

First Aid:EYES-FLUSH WITH WATER. CONSULT A PHYSICIAN IF IRRITATION  
PERSISTS. SKIN-WASH WITH SOAP & WATER. INHALED-REMOVE TO FRESH AIR.  
SEE PHYSICIAN IF IRRITATION OR RESPIRATORY DISTRESS PERSISTS.  
INGESTED-CONS ULT A PHYSICIAN.

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===== Fire Fighting Measures =====

Flash Point:NONE

Extinguishing Media:NON-FLAMMABLE.

Fire Fighting Procedures:NONE.

Unusual Fire/Explosion Hazard:NONE.

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===== Accidental Release Measures =====

Spill Release Procedures:VACUUM LOOSE POWDER ONLY WITH VACUUM EQUIPPED WITH HEPA FILTER. VACUUMS APPROPRIATE FOR METALLIC DUSTS SHOULD BE USED. WIPE AREA CLEAN. DO NOT USE WATER FOR CLEAN-UP OPERATIONS. DO NOT SWEEP. AVOID GENERATING AIRBORNE DUST.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

===== Handling and Storage =====

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLE

MATERIALS. STORE PRODUCT CONTAINERS IN A WELL-VENTILATED, DRY, CLEAN, COOL AREA. STORE TO MINIMIZE SPILLAGE & BREAKAGE.

Other Precautions:AVOID INGESTION, INHALATION AND EXCESSIVE SKIN CONTACT. AVOID CONTACT OF POWDER WITH WATER AND OXIDIZERS.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:A RESPIRATOR APPROVED BY NIOSH W/FILTER CARTRIDGES APPROVED FOR DUST/FUMES/MISTS SHOULD BE WORN AT ALL TIMES DURING THERMAL SPRAY PROCESS TO PROTECT OPERATOR FROM EXPOSURE TO DUST/FUMES.

Ventilation:PRODUCT SHOULD BE USED WITH APPROPRIATE LOCAL EXHAUST VENTILATION PROVIDED.

Protective Gloves:ALUMINIZED-PLASMA SPRAY;RUBBER-OTHER.

Eye Protection:WELDERS GOGGLES W/LENSES.

Other Protective Equipment:WASH FACILITIES ARE RECOMMENDED.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDRY CONTAMINATED CLOTHES BEFORE REUSE.

Supplemental Safety and Health

===== Physical/Chemical Properties =====

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:4200F,2316C

Spec Gravity:2.1

Solubility in Water:NEGLIGIBLE

Appearance and Odor:POWDER, NO ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES NONE.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:OZONE & NITRIC OXIDE ARE FORMED BY PLASMA FLAME (SIMILAR TO WELDING FUMES). THIS ACTION IS INDEPENDENT

OF METAL POWDER.

===== Disposal Considerations =====

Waste Disposal Methods:EMPTY PRODUCT CONTAINERS, PRODUCT WASTE AND CLEANING MEDIA SHOULD BE STORED AND DISPOSED OF ACCORDING TO LOCAL, STATE AND FEDERAL REGULATIONS.

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