

PPG INDUSTRIES INC -- HI-SIL 233 -- 6850-01-022-7031

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

Product ID:HI-SIL 233
MSDS Date:07/03/1991
FSC:6850
NIIN:01-022-7031
MSDS Number: BWSVB
=== Responsible Party ===
Company Name:PPG INDUSTRIES INC
Address:ONE PPG PLACE
City:PITTSBURGH
State:PA
ZIP:15272
Country:US
Info Phone Num:304-843-1300
Emergency Phone Num:304-843-1300
Preparer's Name:R KENNETH LEE
CAGE:9
3915

=== Contractor Identification ===
Company Name:PPG INDUSTRIES INC CHEMICAL DIVISION
Address:ONE GATEWAY CENTER
City:PITTSBURGH
State:PA
ZIP:15222-1416
Country:US
Phone:304-843-1300
CAGE:93915

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

Ingred Name:SILICON DIOXIDE, HYDRATE; (SIO*2 HYDRATE)
RTECS #:VW0600000
Fraction by Wt: 87%
OSHA PEL:N/K
ACGIH TLV:N/K

Ingred Name:SILICA GEL
CAS:112945-52-5
RTECS #:VV7310000
OSHA PEL:6 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:SUPD

AT:TEMPORARILY DEPOSITED IN ANIMALS' LUNGS, MOST OF
DEPOSITED MATL WAS CLEARED SOON AFTER DUST EXPOS ENDED. (ING 4)
RTECS #:9999999ZZ

Ingred Name:ING 3:RSLTS OF ALL STUDES PERFORMED BY, OR KNOWN TO, PPG
INDICATE VERY LOW ORDER OF PULM ACTIVITY FOR SYNTHETIC (ING 5)
RTECS #:9999999ZZ

Ingred Name:ING 4:PRECIPITATED SILICAS. PPG RECOMMENDS THAT PERSONS
W/BRTHG PROBLEMS/LUNG DISEASE SHOULD NOT WORK IN DUSTY (ING 6)
RTECS #:9999999ZZ

Ingred Name:ING 5:AREAS UNLESS PHYS APPROVES & CERTI
FIES THEIR FITNESS
TO WEAR RESPIRATORY PROTECTION.
RTECS #:9999999ZZ

Ingred Name:OTHER PROT EQUIP:BE I/A/W 29 CFR 1910.132 AND 29 CFR
1910.133.
RTECS #:9999999ZZ

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:ACUTE:EXCESSIVE CONT W/POWDER CAN
CAUSE DRYING OF MUC MEMB OF

NOSE, EYES, & THROAT DUE TO ABSORPTION

OF MOISTURE & OILS. THIS MATL CAN ALSO CAUSE NASAL IRRIT &

NOSEBLEEDS. EYE CONT W/POWDER CAN RSLT I N MILD IRRIT.

CHRONIC:EPIDEMIOLOGICAL STUDY WAS CONDUCTED WHICH INCLD 165
PRECIPITATED SILICA WORKERS (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ:WHO HAD BEEN EXPOS AN AVERAGE TIME
SPAN OF 8.6 YRS. OF THESE 165 WORKERS, 44 HAD BEEN EXPOS FOR AN
AVERAGE OF 18 YRS. NO ADVERSE EFTS WERE

NOTED IN COMPLETE MED

EXAMINATIONS (INCLDG CHEST ROE NTGENOGRAMS) OF THESE WORKERS. PULM

FUNCTION DECREMENTS WERE CORRELATED ONLY W/SMOKING & AGE BUT NOT
W/DEGREE/ (SUPDAT)

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

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

First Aid:INGEST:CALL MD IMMEDIATELY . SKIN:FLUSH W/COPIOUS AMOUNTS OF
WATER. CALL MD . INHAL:REMOVE AFFECTED PERSON TO FRESH AIR. IF
IRRIT/DISCOMFORT PERSISTS, CONSUL

T PHYS. EYE:FLUSH W/PLENTY OF W

ATER FOR @ LEAST 15 MINS. IF IRRIT/DISCOMFORT OCCURS, CONSULT PHYS.

NOTES TO PHYS (INCLDG ANTIDOTES):TREAT SYMPTOMATICALLY.

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

Flash Point:NONE

Extinguishing Media:NOT APPLICABLE. MEDIA SUITABLE FOR SURROUNDING FIRE

Fire Fighting Procedures:NOT APPLICABLE. USE NIOSH/MSHA APPROVED SCBA & FULL PROTECTIVE EQUIPMENT .

Unusual Fire/Explosion Hazard:NONE.

===== Accidenta
I Release Measures =====

Spill Release Procedures:VACUUM SPILLED MATL & PLACE IN CLSD PLASTIC BAGS FOR DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE IN DRY AREA. AVOID PRLNGD/RPTD INHAL OF DUST. MAY IRRITATE RESP TRACT. AVOID CONT W/EYES. MAY CAUSE IRRIT & PAIN.

Other Precautions:AVOID PRLNGD, RPTD, OR EXCESSIVE CONT W/SKIN. MAY CAUSE IRRIT &

DISCOMFORT. USE W/ADEQ VENT. VENT MSUT BE SUFFICIENT

TO LIM EMPLOYEE EXPOS TO PROD BELOW PEL EXPOS LIMS. OBSERVANCE OF LOWER LIMS IS ADV ISABLE.

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

Respiratory Protection:NIOSH/MSHA APPRVD DUST FILTER RESPIRATOR EXPOS ABOVE PEL EXPOS LIMS. RESP USE LIMITATIONS MAY BE NIOSH/MSHA/MFR MUST BE OBSERVED. RESP PROT PROGRAMS MUST BE I/A/W 29 CFR 1910.134.

Ventilation:GEN/LOC EXHAUST SUFFICIENT TO MAINTAIN EMPLOYEE EXPOS BELOW

PEL EXPOS LIMITS.

Protective Gloves:CLOTH, LEATHER, OR RUBBER.

Eye Protection:ANSI APPRVD CHEM WORKERS GOGGS .

Other Protective Equipment:BOOTS, APRONS, OR CHEM SUITS SHOULD BE USED WHEN NEC TO PVNT SKIN CONT. PERSONAL PROT CLTHG & USE OF EQUIP MUST (ING 7)

Work Hygienic Practices:WASH THORO EVERYDAY AFTER WORK. DO NOT EAT, DRINK OR SMOKE IN WORK AREA.

Supplemental Safety and Health

PH:6.5-7.3 (5% SUSPENSION). MATLS TO AVOID:ADDITIVES MAY ALTER TOXICOLOGICAL PROPETIES.

EFFECTS OF OVEREXPOSURE: DURATION OF DUST EXPOSURE.

LABORATORY STUDIES HAVE ALSO BEEN CONDUCTED IN SMALL ANIMALS VIA INHALATION TO LEVELS OF PRECIPITATED SILICA DUST OF UP TO 126 MG/CU.M. FOR PERIODS FROM 6 MONTHS TO 2 YEARS. ALTHOUGH PRECIPITATED SILICA WAS (INGESTIBLE)

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

Vapor Pressure: NONE

pH: SUPDAT

Solubility in Water: ESSENTIALLY INSOLUBLE

Appearance and Odor: WHITE, ODORLESS POWDER

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

Stability I

Indicator/ Materials to Avoid: YES

AVOID ALTERATION OF PRODUCT PROPERTIES BEFORE USE. CALCINING, WHICH MAY RESULT IN CRYSTALLINE FORMATION/ MIXING WITH (SUPDAT)

Stability Condition to Avoid: HIGH TEMPERATURES (>800C) TREATMENT (CALCINING).

Hazardous Decomposition Products: NONE.

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

Waste Disposal Methods: WASTE FROM THIS PRODUCT MAY BE DISPOSED OF IN SANITARY LANDFILL IF FEDERAL, STATE AND LOCAL REGULATIONS PERMIT. CARE SHOULD BE EXERCISED TO AVOID CREATION OF DUST DURING DISPOSAL OPERATIONS.

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