

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BUEHLER IRON OXIDE

IDENTIFICATION NUMBER: 40-6445-016, 40-6445-080

PRODUCT USE/CLASS: Polishing compound

SUPPLIER:

BUEHLER, a division of Illinois Tool Works Inc.

41 WAUKEGAN ROAD

LAKE BLUFF, IL 60044

EMERGENCY: 800-424-9300

INFORMATION: 847-295-6500

PREPARER: Technical Department, 847-295-6500

PREPARE DATE: 03/23/09, 23 March 2009

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS							
ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%				
01	Silicon dioxide (quartz)	14808-60-7	1.0-5.0				
02	Iron oxide	1332-037-2	60.0-100.0				
О3	Aluminium oxide	1344-28-1	1.0-5.0				

MSDS NUMBER: 9105095

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS								
ITEM	ACGIH TLV-	ACGIH TLV-	OSHA PEL-TWA	OSHA PEL -	COMPANY TLV-	SKIN		
	TWA	STEL		CEILING	TWA			
01	0.1 mg/m ³	N.E.	0.1 mg/m ³	N.E.	O.1 mg/m³	NO		
02	5mg/m³ (as	N.E.	10 mg/m³	N.E.	N.E.	NO		
	Fe)							
03	10 mg/m ³	N.E.	10 mg/m³	N.E.	N.E.	NO		
(SEE SECTION 16 FOR ABBREVIATION LEGEND)								

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Dust irritating to respiratory tract.

ACUTE EFFECTS - EYE CONTACT: Mechanical irritant. Contact may cause tearing and redness.

ACUTE EFFECTS - SKIN CONTACT: Mechanical irritant. Prolonged contact may cause skin abrasion.

ACUTE EFFECTS - INHALATION: Dust or vapors may be slightly irritating to respiratory tract. Prolonged inhalation may be harmful.

ACUTE EFFECTS - INGESTION: May cause nausea and vomiting.

CHRONIC OVEREXPOSURE EFFECTS: *This product contains encapsulated silicon dioxide (quartz, silica). No exposure to free respirable silica is anticipated during normal use of this product. It should be noted, however, that free respirable silica may be released by grinding or machining of cured compound and has been listed as a confirmed human carcinogen by NTP and IARC. Inhalation of free respirable silica may cause silicosis or other serious delayed lung injury. Recent studies have also suggested that individuals with silicosis are at increased risk of developing tuberculosis, scleroderma, and/or increased incidence of kidney lesions.

OTHER INFORMATION: No information.

PRIMARY ROUTE(S) OF ENTRY: INHALATION

SECTION 4 - FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

SKIN CONTACT: Wash with soap and water. Get medical attention if irritation develops or persists.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

INGESTION: If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

NOTES TO PHYSICIAN: No information.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: N.A.

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: N.A.

EXTINGUISHING MEDIA: N.A.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Does not burn

SPECIAL FIREFIGHTING PROCEDURES: Does not burn

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Reclaim clean material. Contaminated material should be swept or shoveled into appropriate waste container and disposed of in accordance with applicable federal, state and local regulations.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Minimize dust generation and accumulation.

STORAGE: No information.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: If exposure levels are unknown, if levels exceed TLV/PEL, or if effects occur, use

NIOSH-approved dust/mist respirator in accordance with applicable health and safety regulations and manufacturer's

recommendations.

SKIN PROTECTION: Clean clothing to cover skin.

EYE PROTECTION: No information.

OTHER PROTECTIVE EQUIPMENT: No information.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE: N.A. VAPOR DENSITY: Is heavier than air

ODOR: None ODOR THRESHOLD: No data

APPEARANCE: Red to brown EVAPORATION RATE: Is slower than Butyl

Acetate

SOLUBILITY IN H₂O: Insoluble

FREEZE POINT: No data SPECIFIC GRAVITY: 2.6595

VAPOR PRESSURE: N.A. pH @ 0.0%: N.A.

PHYSICAL STATE: Solid VISCOSITY: N.A.

COEFFICIENT OF WATER/OIL DISTRIBUTION: No data

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: No information.

INCOMPATIBILITY: No information.

HAZARDOUS DECOMPOSITION PRODUCTS: No information.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

No product or component toxicological information is available.

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL TEST DATA: No information.

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Material as sold may be disposed of in landfill if local regulations permit. If material becomes contaminated, follow disposal instructions for contaminant.

SECTION 14 - TRANSPORTATION INFORMATION				
DOT PROPER SHIPPING NAME: Not regulated				
DOT TECHNICAL NAME: N.A.				
DOT HAZARD CLASS: N.A.	HAZARD SUBCLASS: N.A.			
DOT UN/NA CLASS: N.A.	PACKAGING GROUP: N.A.			
	RESP. GUIDE PAGE:			
INTERNATIONAL SHIPPING NAME: Not regulated				
INTERNATIONAL ID NUMBER: N.A.				
IMDG CLASS (1°, 2°): N.A.	IMDG PAGE NUMBER: N.A.			
IMDG EMS: N.A.	IATA CLASS (1°, 2°): N.A.			
ADR ITEM NO.: N.A.	ADR TREMCARD: N.A.			
SUPPLEMENTAL INFORMATION: No information				

SECTION 15 - REGULATORY INFORMATION

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

<u>CERCLA - SARA HAZARD CATEGORY</u>: THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: CHRONIC HEALTH HAZARD

SARA SECTION 313: THIS PRODUCT CONTAINS THE FOLLOWING SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 AND 40 CFR PART 372:

----- CHEMICAL NAME ----- CAS NUMBER WT/WT % IS LESS THAN

No SARA Section 313 components exist in this product.

TOXIC SUBSTANCE CONTROL ACT: THE CHEMICAL SUBSTANCES IN THIS PRODUCT ARE ON THE TSCA SECTION 8 INVENTORY. THIS PRODUCT CONTAINS THE FOLLOWING CHEMICAL SUBSTANCES SUBJECT TO THE REPORTING REQUIREMENTS OF TSCA 12(B) IF EXPORTED FROM THE UNITED STATES:

----- CHEMICAL NAME ----- CAS NUMBER

No components found.

NEW JERSEY RIGHT-TO-KNOW: THE FOLLOWING MATERIALS ARE NON-HAZARDOUS, BUT ARE AMONG THE TOP 5 COMPONENTS IN THIS PRODUCT: None

PENNSYLVANIA RIGHT-TO-KNOW: THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%: None

<u>CALIFORNIA PROPOSTION 65</u>: WARNING: This product contains a chemical(s) known to the state of California to cause cancer. (Silicon dioxide)

CANADIAN WHMIS: THIS MSDS HAS BEEN PREPARED IN COMPLIANCE WITH CONTROLLED PRODUCT REGULATIONS EXCEPT FOR USE OF THE 16 HEADINGS.

CANADIAN WHMIS CLASS: D2B

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: No information.

CERCLA RQ VALUE (MINIMUM): None known

SECTION 16 - OTHER INFORMATION

HMIS RATINGS

HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 05/20/06; 20 MAY 06

REASON FOR REVISION: Administrative change for new format.

VOLATILE ORGANIC COMPOUNDS: 0 grams/ltr

LEGEND:

N.A. - NO INFORMATION N.E. - NOT ESTABLISHED N.D. - NOT DETERMINED

ABBREVIATIONS: ACGIH = AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS; OSHA = OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION; TLV-TWA = THRESHOLD LIMIT VALUE — TIME WEIGHTED AVERAGE (8 HOURS); STEL = SHORT-TERM EXPOSURE LIMIT (15 MINUTES); C = CEILING VALUE; PEL = PERMISSIBLE EXPOSURE LIMIT

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