



## MATERIAL SAFETY DATA SHEET

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MASTERPREP ALUMINA SUSPENSION & MICROPOLISH II ALUMINA SUSPENSION

IDENTIFICATION NUMBER: MASTERPREP: 40-6377-032, 40-6377-064, & 63-6377-006

MICROPOLISH: 40-6361-006, 40-6363-006, & 40-6363-128

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: 4/03/2012, 03 April 2012

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%
01	Water	7732-18-5	20 - 45
02	Aluminum Oxide	1344-28-1	5 - 23
03	Propylene Glycol	57-55-6	5 - 30
04	Hydroxyethyl Cellulose	9004-62-0	1 - 12

## SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL – CEILING	COMPANY TLV-TWA	SKIN
01	--	--	--	--	--	NO
02	N.E.	N.E.	15 mg/m <sup>3</sup> (dust)	N.E.	N.E.	NO
03	10 mg/m <sup>3</sup>	N.E.	N.E.	N.E.	N.E.	NO
04	N.E.	N.E.	N.E.	N.E.	N.E.	NO

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

## SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Not expected to present a hazard in normal industrial use.

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

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

ACUTE EFFECTS – INHALATION: Not expected to present a hazard in normal industrial use (room temperature processing)

ACUTE EFFECTS - INGESTION: Not expected to present a hazard in normal industrial use. Ingestion of large amounts may cause nausea and vomiting.

CHRONIC OVEREXPOSURE EFFECTS: No information.

OTHER INFORMATION: No information.

PRIMARY ROUTE(S) OF ENTRY: INHALATION

## SECTION 4 – FIRST AID MEASURES

**EYE CONTACT:** Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persists.

**SKIN CONTACT:** In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. 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, loosen tight clothing such as a collar, tie, belt or waistband. 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:** Treat symptomatically.

## 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:** CO<sub>2</sub>, Foam, Dry Chemical, Water Spray

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Does not burn

**SPECIAL FIREFIGHTING PROCEDURES:** Wear a NIOSH approved positive pressure self-contained breathing apparatus with full protective clothing. Do not release runoff from fire control methods to sewers or waterways.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wipe up spill. Contaminated material should be swept or shoveled into appropriate waste container and disposed of in accordance with applicable federal, state and local regulations. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

## SECTION 7 – HANDLING AND STORAGE

**HANDLING:** Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**STORAGE:** Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS:** General ventilation usually adequate.

**RESPIRATORY PROTECTION:** If effects occur, use NIOSH-approved dust/mist respirator in accordance with applicable health and safety regulations and manufacturer's recommendations. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator

**SKIN PROTECTION:** Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product..

**EYE PROTECTION:** Eye protection (i.e., safety glasses, safety goggles and/or face shield) should be determined based on conditions of use.

**OTHER PROTECTIVE EQUIPMENT:** Eyewash stations and safety showers.

**HYGIENIC PRACTICES:** Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	212-Unk deg F	VAPOR DENSITY:	Is lighter than air
ODOR:	None	ODOR THRESHOLD:	N.A.
APPEARANCE:	White liquid	EVAPORATION RATE:	Is slower than Butyl Acetate
SOLUBILITY IN H <sub>2</sub> O:	Moderate		
FREEZE POINT:	< 32 deg F	SPECIFIC GRAVITY:	1.05-1.2
VAPOR PRESSURE:	No data	pH @ 0.0%:	N.A.
PHYSICAL STATE:	Liquid	VISCOSITY:	Medium
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.A.		

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

## SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: Strong acids.

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

ACUTE TOXICITY:

Product	Result	Species	Dose
Propylene Glycol	LD50 Dermal .....	Rabbit.....	20800 mg/kg
	LD50 Oral .....	Rat .....	20 g/kg

## SECTION 12 – ECOLOGICAL INFORMATION

ECOTOXICITY: No known significant effects or critical hazards.

Product	Result	Species	Exposure
Propylene Glycol	Acute LC50 >1000 mg/L Marine water	Crustaceans – .....	48 hours
		Chaetogammarus marinus - Young - 5 mm	
	Acute LC50 1020000 ug/L Fresh water	Daphnia - .....	48 hours
		Ceriodaphnia dubia -<=24 hours	
	Acute LC50 710000 ug/L Fresh water	Fish - Pimephales promelas -<=7 days.....	96 hours
	Chronic NOEC 660000 ug/L Fresh water	Daphnia - .....	48 hours
		Ceriodaphnia dubia -<=24 hours	
	Chronic NOEC 600000 ug/L Fresh water	Fish - Pimephales promelas - <=7 days .....	96 hours

## SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: This material and its container must be disposed of in a safe way. Dispose of in accordance with federal, state and local regulations. The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14 – TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Not regulated.

DOT TECHNICAL NAME: N.A.

HAZARD SUBCLASS: N.A.

DOT HAZARD CLASS: N.A.

PACKAGING GROUP: N.A.

DOT UN/NA CLASS: 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.

## SECTION 15 – REGULATORY INFORMATION

OSHA: Non-hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

CERCLA – SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: NONE

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

Aluminium Oxide..... 1344-28-1 .....5-23

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

Aluminium Oxide..... 1344-28-1

Propylene Glycol..... 57-55-6

Hydroxyethyl Cellulose..... 9004-62-0

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

CANADIAN WHMIS CLASS: NOT REGULATED

COMPONENT RCRA CLASSIFICATIONS: NOT REGULATED

COMPONENT RCRA CODES: No information.

CERCLA RQ VALUE (MINIMUM): None known

## SECTION 16 – OTHER INFORMATION

### HMIS RATINGS

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 03/23/09; 23 March 2009

REASON FOR REVISION: Administrative change for new format. Revised section(s): 1, 6, 7, 11, 12, 13, 15, 16

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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