

M A T E R I A L S A F E T Y D A T A S H E E T

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : BUEHLER ACU-THIN, METABRASE, DELTA ABRASIVE CUT-OFF WHEELS
 IDENTIFICATION NUMBER: 10-4060 THRU 10-5650, 10-9210 THRU 10-9250 11-4207, 11-4217,
 12-4310 THRU 12-4350, 12-5610 THRU 12-5650, 12-9810 THRU 12-9850
 PRODUCT USE/CLASS : Abrasive
 SUPPLIER:
 Buehler, Ltd.
 41 Waukegan Road
 Lake Bluff, IL 60044
 EMERGENCY: 800-424-9300
 INFORMATION: 847-295-6500

PREPARER: Technical Department, PHONE: 847-295-6500

PREPARE DATE: 05/21/03; 20 MAY 03

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%
01	Sulfur	7704-34-9	1.0-5.0
02	Aluminum oxide	1344-28-1	60.0-100.0
03	Silicon Carbide	409-21-2	60.0-100.0

ITEM	ACGIH		OSHA		COMPANY	SKIN
	TLV-TWA	TLV-STEL	PEL-TWA	PEL-CEILING	TLV-TWA	
01	10 mg/m3	N.E.	10 mg/m3	N.E.	N.E.	NO
02	10 mg/m3	N.E.	15 mg/m3	N.E.	N.E.	NO
03	10 mg/m3	N.E.	15 mg/m3	N.E.	N.E.	NO

(See Section 16 for abbreviation legend)

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if inhaled. 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 of dust may be harmful.

ACUTE EFFECTS - INGESTION: Not expected to present a hazard in normal industrial use.

CHRONIC OVEREXPOSURE EFFECTS: Not Applicable.

OTHER INFORMATION: Not Applicable.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT, INHALATION,

Continued on Page 2)

Product: 10-4060 THRU 10-5650, 11-4207, 11-4217,
12-4310 THRU 12-4350, 12-5610 THRU 12-5650
Preparation Date: 05/20/03

Page 2

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: Not Applicable.

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: Not Applicable.

SPECIAL FIREFIGHTING PROCEDURES: Does not burn.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: N/A

SECTION 7 - HANDLING AND STORAGE

HANDLING: Minimize dust generation and accumulation.

STORAGE: Not Applicable.

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: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Cloth or synthetic gloves

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

Continued on Page 3)

Product: 10-4060 THRU 10-5650, 11-4207, 11-4217,
12-4310 THRU 12-4350, 12-5610 THRU 12-5650
Preparation Date: 05/21/03

Page 3

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE : N/A. VAPOR DENSITY : N/A
ODOR : NONE ODOR THRESHOLD : N/A
APPEARANCE : Solid wheel EVAPORATION RATE: N/A
SOLUBILITY IN H2O : Insoluble
FREEZE POINT : N/A SPECIFIC GRAVITY: > 2
VAPOR PRESSURE : N/A pH @ 0.0 % : N/A
PHYSICAL STATE : N/A VISCOSITY : N/A
COEFFICIENT OF WATER/OIL DISTRIBUTION: N/A
(See Section 16 for abbreviation legend)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Not Applicable.

INCOMPATIBILITY: Strong bases or oxidants. Organic peroxides.

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

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: Not Available

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.

TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Not regulated for transport
DOT TECHNICAL NAME: N/A
DOT HAZARD CLASS: N/A HAZARD SUBCLASS: N/A
DOT UN/NA NUMBER: N/A PACKING GROUP: N/A RESP. GUIDE PAGE:

INTERNATIONAL SHIPPING NAME: Not regulated for transport
INTERNATIONAL ID NUMBER: N/A
IMDG CLASS (10,20): N/A PACKING GROUP: N/A
IMDG EMS: N/A IATA CLASS (10,20): N/A
ADR ITEM NO.: N/A ADR TREMCARD: N/A

SUPPLEMENTAL INFORMATION: Not Applicable.

Continued on Page 4)

Product: 10-4060 THRU 10-5650, 11-4207, 11-4217,
12-4310 THRU 12-4350, 12-5610 THRU 12-5650
Preparation Date: 05/20/03

Page 4

SECTION 15 - REGULATORY INFORMATION

OSHA: 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
No SARA Section 313 components exist in this product.

TOXIC SUBSTANCES 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 five components in this product:

----- CHEMICAL NAME ----- CAS NUMBER
Silicon carbide 409-21-2
Aluminum oxide 1344-28-1

PENNSYLVANIA RIGHT-TO-KNOW:

The following non-hazardous ingredients are present in the product at greater than 3%:

----- CHEMICAL NAME ----- CAS NUMBER
Silicon carbide 409-21-2
Aluminum oxide 1344-28-1

CALIFORNIA PROPOSITION 65:

No Proposition 65 chemicals known to exist in this product.

CANADIAN WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

CANADIAN WHMIS CLASS: NONE

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: Not Applicable.

CERCLA RQ VALUE (MINIMUM): None known

SECTION 16 - OTHER INFORMATION

HMIS RATINGS - HEALTH: 0 FLAMMABILITY: 0 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 05/19/98

REASON FOR REVISION: new format

Continued on Page 5)

Product: 10-4060 THRU 10-5650, 11-4207, 11-4217,
12-4310 THRU 12-4350, 12-5610 THRU 12-5650
Preparation Date: 05/20/03

Page 5

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| SECTION 16 - OTHER INFORMATION |
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ADMINISTRATIVE REVISION DATE: 09/19/03
REASON FOR ADMINISTRATIVE REVISION: Updates to Sections 1

VOLATILE ORGANIC COMPOUNDS (VOCs): 0 grams/ltr

LEGEND: N.A. - Not Applicable, N.E. - Not Established,
N.D. - Not Determined

ABBREVIATIONS: ACGIH = American Conference of Governmental Industrial Hygienists; OSHA = US Occupational Safety and Health Administration; UK = United Kingdom; TLV-TWA = Threshold Limit Value-Time Weighted Average (8 hrs); STEL = Short-Term Exposure Limit (15 min); C = Ceiling Value; PEL = Permissible Exposure Limit

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Consult www.buehler.com periodically to assure latest revision.

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<END OF MSDS>