

MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BUEHLER COOLMET

IDENTIFICATION NUMBER: 10-3330-032, 10-3330-128, 10-3330-640

PRODUCT USE/CLASS: Lubricant

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: 3/23/2009, 23 March 2009

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS						
ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%			
01	Triethanolamine	102-71-6	30.0-60.0			

ITEM	ACGIH TLV-	ACGIH TLV-	OSHA PEL-TWA	OSHA PEL -	COMPANY TLV-	SKIN
	TWA	STEL		CEILING	TWA	
01	5 mg/m ³	N.E.	N.E.	N.E.	N.E.	NO

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

MSDS NUMBER: 9112501

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Contact with skin or eyes may be irritating. Harmful if swallowed.

ACUTE EFFECTS - EYE CONTACT: Slightly irritating but does not injure eye tissue.

ACUTE EFFECTS - SKIN CONTACT: Not expected to present a hazard in normal industrial use. Prolonged contact may cause defatting and redness.

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

ACUTE EFFECTS - INGESTION: Irritating to mouth, throat and stomach, with nausea. Small amounts (a tablespoonful) swallowed during normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

CHRONIC OVEREXPOSURE EFFECTS: None known.

OTHER INFORMATION: Not Applicable.

PRIMARY ROUTE(S) OF ENTRY: EYE CONTACT

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: If symptoms occur, remove to fresh air. Medical personnel may administer oxygen if breathing is difficult.

Seek medical attention if symptoms persist.

INGESTION: Swallowing less than an ounce will not cause significant harm. For larger amounts, do not induce vomiting, but give one or two glasses of water to drink and get medical attention.

NOTES TO PHYSICIAN: Not Applicable.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: does not flash

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: No data

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. Absorb contaminated with inert material such as clay. 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: Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Avoid contact with skin and eyes.

STORAGE: Keep from freezing.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: None normally required under general ventilation. If TLV/PEL is exceeded, if use is performed in a poorly-ventilated space, or if inhalation effects occur, use NIOSH-approved vapor cartridge respirator in accordance with applicable health and safety regulations and manufacturer's recommendations.

SKIN PROTECTION: Clean clothing to cover skin. Butyl or Neoprene rubber gloves. Nitrile gloves. PVA or PVC gloves.

EYE PROTECTION: Safety glasses.

OTHER PROTECTIVE EQUIPMENT: Accessible eye wash and safety shower.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use. Do not smoke or eat during use.

SECTION 9 - PHYSICAL AND CHEWICAL PROPERTIES						
BOILING RANGE:	217 deg F	VAPOR DENSITY:	No information			
ODOR:	No appreciable	ODOR THRESHOLD:	No data			
APPEARANCE:	Clear	EVAPORATION RATE:	Is slower than Butyl Acetate			
SOLUBILITY IN H2O:	Complete					
FREEZE POINT:	No data	SPECIFIC GRAVITY:	1.1209			
VAPOR PRESSURE:	<1 psi @20degC	pH @ 0.0%:	8.4			
PHYSICAL STATE:	Liquid	VISCOSITY:	Low			
COEFFICIENT OF WATER	R/OIL DISTRIBUTION:	No data				

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Not Applicable.

INCOMPATIBILITY: Strong bases or oxidants. Strong acids. Reaction with some nitrates or nitrites can cause the

formation of cancer-causing nitrosoamines.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon. Oxides of nitrogen, ammonia.

HAZARDOUS POLYMERIZATION: Will not occur under normal conditions.

STABILITY: This product is stable under normal storage conditions.

SECTION 11 - TOXICOLOGICAL PROPERTIES

COMPONENT TOXICOLOGICAL INFORMATION:

----- CHEMICAL NAME ------ LD50 ----- LC50 -----

Triethanolamine oral(rat)8g/kg No Information

SECTION 12 - ECOLOGICAL INFORMATION

ECOLOGICAL TEST DATA: Not Available

SECTION 13 - DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Review all current federal, state, and local regulations regarding health and disposal for appropriate disposal procedures. Material "as sold" is not considered a hazardous waste per Federal RCRA regulations.

MSDS NUMBER: 9112501

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 as hazardous for transport				
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: 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 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: ----- CHEMICAL NAME ----- CAS NUMBER 7732-18-5 Water

PENNSYLVANIA RIGHT-TO-KNOW: THE FOLLOWING NON-HAZARDOUS INGREDIENTS ARE PRESENT IN THE PRODUCT AT GREATER THAN 3%:

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

Water 7732-18-5

SECTION 15 - REGULATORY INFORMATION

CALIFORNIA PROPOSTION 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: NOT REGULATED

CANADIAN DSL/NDSL status: The chemical substances in this product are on the DSL.

COMPONENT RCRA CLASSIFICATIONS: Not Applicable.

COMPONENT RCRA CODES: Not Applicable.

CERCLA RQ VALUE (MINIMUM): Not Applicable.

SECTION 16 - OTHER INFORMATION

HMIS RATINGS

HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 12/05/03, 5 Dec 2003

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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