



## MATERIAL SAFETY DATA SHEET

### SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BUEHLER ISOCUT PLUS FLUID

IDENTIFICATION NUMBER: 11-2293-016

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: 03/23/09, 23 March 2009

### SECTION 2 – COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS NUMBER	WT/WT%			
01	Triethanolamine	102-71-6	10.0-30.0			
02	Monoethanolamine	141-43-5	5.0-10.0			
ITEM	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL – CEILING	COMPANY TLV-TWA	SKIN
01	5 mg/m <sup>3</sup>	N.E.	N.E.	N.E.	N.E.	NO
02	3 ppm	6 ppm	N.E.	N.E.	N.E.	NO

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

### SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if swallowed. May cause eye irritation. Vapors from heated material may be irritating.

ACUTE EFFECTS – EYE CONTACT: Moderately irritating to the eyes.

ACUTE EFFECTS - SKIN CONTACT: Mild irritant. Prolonged contact may cause defatting and redness.

ACUTE EFFECTS – INHALATION: Vapors from heated material may be irritating.

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

CHRONIC OVEREXPOSURE EFFECTS: \*Preexisting pulmonary and dermatological disorders may be aggravated by exposure to hazardous components.

OTHER INFORMATION: Not Applicable.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT, INGESTION, 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: 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: >200 F (PENSKY-MARTENS C.C.)

LOWER EXPLOSIVE LIMIT: N.A.

UPPER EXPLOSIVE LIMIT: N.A.

AUTOIGNITION TEMPERATURE: No data

EXTINGUISHING MEDIA: ALCOHOL FOAM, CO<sub>2</sub>, DRY CHEMICAL, FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may rupture or explode (due to pressure build-up) when exposed to extreme heat. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Use NIOSH-approved self-contained breathing apparatus and full protective clothing. Use water to cool exposed containers. Water stream directed into fire may cause frothing with subsequent spread of flame.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Reclaim clean material. Absorb contaminated material 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: Wash hands before eating. Avoid prolonged or repeated contact with skin. DO NOT take internally. FOR INDUSTRIAL USE ONLY.

STORAGE: Store away from heat. KEEP OUT OF THE REACH OF CHILDREN.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: General ventilation usually adequate.

RESPIRATORY PROTECTION: None normally required under general ventilation. 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. Butyl rubber gloves. Neoprene gloves. Nitrile gloves. PVA gloves. PVC gloves.

EYE PROTECTION: Safety glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: Accessible eye wash and safety shower.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use. DO NOT reuse empty containers without commercial clean or recondition. Follow all MSDS/label precautions even after container is emptied.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	208 deg F	VAPOR DENSITY:	No information
ODOR:	Mild nondescript	ODOR THRESHOLD:	No data
APPEARANCE:	Blue	EVAPORATION RATE:	Is slower than Butyl Acetate
SOLUBILITY IN H <sub>2</sub> O:	Complete		
FREEZE POINT:	No data	SPECIFIC GRAVITY:	1.05
VAPOR PRESSURE:	< 1 psi @ 25degC	pH @ 0.0%:	8.8-9.6
PHYSICAL STATE:	Liquid	VISCOSITY:	Low
COEFFICIENT OF WATER/OIL DISTRIBUTION:	No data		

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

## SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Prolonged exposure to heat.

INCOMPATIBILITY: Strong bases or oxidants. Strong acids. Reaction with nitrites or nitrosating agents may produce cancer-causing nitrosamines.

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

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	Not Applicable
Monoethanolamine	Derm(rbt)> 2 g/kg	Not Applicable

## 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. Not regulated as hazardous under RCRA regulations if disposed of "as sold."

## SECTION 14 – 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 CLASS: N.A.

PACKAGING GROUP: N.A.

RESP. GUIDE PAGE:

INTERNATIONAL SHIPPING NAME: Not regulated 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: IMMEDIATE 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 known

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

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: D2B

COMPONENT RCRA CLASSIFICATIONS: Not regulated

COMPONENT RCRA CODES: Not Applicable.

CERCLA RQ VALUE (MINIMUM): None known

## SECTION 16 – OTHER INFORMATION

### HMIS RATINGS

HEALTH: 1

FLAMMABILITY: 0

REACTIVITY: 0

PREVIOUS MSDS REVISION DATE: 05/15/06, 15 May 2006

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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