SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: BUEHLER SILICONE MOLD RELEASE
IDENTIFICATION NUMBER: 20-3046
PRODUCT USE/CLASS: Mold release

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

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>WT/WT%</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Dichloromethane</td>
<td>75-09-2</td>
<td>60.0-100.0</td>
</tr>
<tr>
<td>02</td>
<td>1,1,1,2-tetrafluoroethane</td>
<td>811-97-2</td>
<td>10.0-30.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ACGIH TLV-TWA</th>
<th>ACGIH TLV-STEL</th>
<th>OSHA PEL-TWA</th>
<th>OSHA PEL-CEILING</th>
<th>COMPANY TLV-TWA</th>
<th>SKIN</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>50 ppm</td>
<td>N.E.</td>
<td>50 ppm</td>
<td>200 ppm</td>
<td>50 ppm</td>
<td>NO</td>
</tr>
<tr>
<td>02</td>
<td>1000 ppm</td>
<td>N.E.</td>
<td>1000 ppm</td>
<td>N.E.</td>
<td>N.E.</td>
<td>NO</td>
</tr>
</tbody>
</table>

(SEE SECTION 16 FOR ABBREVIATION LEGEND)
SECTION 3 – HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Harmful if inhaled or swallowed. High vapor concentrations may cause drowsiness. Contents under pressure. Respiratory irritant. May cause skin and eye irritation.

ACUTE EFFECTS - EYE CONTACT: Irritating, but will not permanently injure eye tissue.

ACUTE EFFECTS - SKIN CONTACT: Contact causes severe skin irritation and possible burns.

ACUTE EFFECTS - INHALATION: Harmful if inhaled. Liquid aspirated into lungs may cause serious injury or death. Can cause severe central nervous system depression, including unconsciousness. High vapor concentrations are irritating to the eyes, nose, throat and lungs. +Extreme overexposure to 1,1,1,2-tetrafluoroethane may cause cardiac arrhythmia. Effects are worsened by activity following overexposure.

ACUTE EFFECTS - INGESTION: Moderately toxic. May cause nausea and vomiting.

CHRONIC OVEREXPOSURE EFFECTS: * Preexisting pulmonary and dermatological disorders may be aggravated by exposure to hazardous components. +Studies suggest that solvent chronic overexposure effects are targeted at the liver and central nervous system. Deliberate and repeated inhalation of concentrated solvent vapors may cause permanent neural injury. Consumption of alcohol in conjunction with repeated solvent exposure may cause color vision defects. +Component(s) in this material are considered to have caused cancer in laboratory animal studies.

OTHER INFORMATION: Not Applicable.

PRIMARY ROUTE(S) OF ENTRY: SKIN CONTACT, SKIN ABSORPTION, INHALATION, 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: 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: In case of poisoning, do not give epinephrin. Treat ventricular arrhythmias with beta-blocking agents. Keep patient calm.
SECTION 5 – FIRE FIGHTING MEASURES

FLASH POINT: N.A.
LOWER EXPLOSIVE LIMIT: N.A.
UPPER EXPLOSIVE LIMIT: N.A.
AUTOIGNITION TEMPERATURE: No data

EXTINGUISHING MEDIA: CO₂, DRY CHEMICAL, FOAM

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may rupture or explode (due to pressure build-up) when exposed to extreme heat. "Empty" containers may retain dangerous product residues or explosive vapors. Do NOT pressurize, cut, weld, braze, solder, drill or grind on or near empty containers. Store full and empty containers away from heat, sparks, flame, and other sources of ignition. Observe all labeled precautions. Irritating and/or toxic gases or fumes may be generated by thermal decomposition or combustion.

SPECIAL FIREFIGHTING PROCEDURES: Wear a NIOSH approved positive pressure self-contained breathing apparatus with 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: Wipe up excess material. Dispose of damaged aerosol container in accordance with applicable federal, state and local regulations regarding "empty" chemical containers.

SECTION 7 – HANDLING AND STORAGE

HANDLING: Use with adequate ventilation. Follow all MSDS/label precautions even after container is emptied because it may retain product residues. Avoid contact with skin and eyes. FOR INDUSTRIAL USE ONLY.

STORAGE: Keep away from heat, sparks and flame. Do not store in direct sunlight. KEEP OUT OF THE REACH OF CHILDREN.
SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Local exhaust as needed to control vapor or dust levels to below lowest component TLV.

RESPIRATORY PROTECTION: 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. Neoprene gloves.

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: Accessible eye wash and safety shower.

HYGIENIC PRACTICES: Follow good general industrial safety practices during use. Do not smoke or eat during use. Follow all MSDS/label precautions even after container is emptied.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILING RANGE:</td>
<td>103 - 104 F</td>
</tr>
<tr>
<td>VAPOR DENSITY:</td>
<td>Is heavier than air</td>
</tr>
<tr>
<td>ODOR:</td>
<td>Strong solvent</td>
</tr>
<tr>
<td>ODOR THRESHOLD:</td>
<td>Appr 10 ppm</td>
</tr>
<tr>
<td>APPEARANCE:</td>
<td>Clear</td>
</tr>
<tr>
<td>EVAPORATION RATE:</td>
<td>Is faster than Butyl Acetate</td>
</tr>
<tr>
<td>SOLUBILITY IN H₂O:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>FREEZE POINT:</td>
<td>No data</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>1.1679</td>
</tr>
<tr>
<td>VAPOR PRESSURE:</td>
<td>30 psig @ 70 F</td>
</tr>
<tr>
<td>pH @ 0.0%:</td>
<td>N.A.</td>
</tr>
<tr>
<td>PHYSICAL STATE:</td>
<td>Gas</td>
</tr>
<tr>
<td>VISCOSITY:</td>
<td>N.A.</td>
</tr>
<tr>
<td>COEFFICIENT OF WATER/OIL DISTRIBUTION:</td>
<td>No data</td>
</tr>
</tbody>
</table>

(SEE SECTION 16 FOR ABBREVIATION LEGEND)

SECTION 10 – STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Prolonged exposure to heat.

INCOMPATIBILITY: Strong Lewis or mineral acids.


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
Dichloromethane ...................................... Oral/rat-1600mg/kg ...... rat-30m 88000mg/m3
1,1,1,2-tetrafluoroethane .................... No information ................ Inh-rat=1500g/m3/4

SECTION 12 – ECOLOGICAL INFORMATION

ECOLOGICAL TEST DATA: Not Available

SECTION 13 – DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Follow disposal instructions for contaminant. Dispose of in accordance with federal, state and local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

DOT PROPER SHIPPING NAME: Aerosols, non-flammable
DOT TECHNICAL NAME: N.A.          HAZARD SUBCLASS: N.A.
DOT HAZARD CLASS: 2.2             PACKAGING GROUP: III
DOT UN/NA CLASS: UN1950          RESP. GUIDE PAGE: 126

INTERNATIONAL SHIPPING NAME:
ICAO/IATA: Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III
IMO/IMDG : Aerosols

INTERNATIONAL ID NUMBER: UN1950
IMDG CLASS (1°, 2°): 2, none          PACKING GROUP: III
IMDG EMS: 213                     IATA CLASS (1°, 2°): 2.2, 6.1
ADR ITEM NO.: N.A.                ADR TREMCARD: N.A.
SUPPLEMENTAL INFORMATION: Not Applicable.

CERCLA – SARA HAZARD CATEGORY: THIS PRODUCT HAS BEEN REVIEWED, AND IS CONSIDERED, UNDER APPLICABLE DEFINITIONS, TO MEET THE FOLLOWING CATEGORIES: IMMEDIATE HEALTH HAZARD CHRONIC HEALTH HAZARD PRESSURE 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
Dichloromethane...................................75-09-2..................60.0 – 100.0

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
Dichloromethane.............................75-09-2

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
Polydimethylsiloxane....................63148-62-9

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

CHEMICAL NAME --------------- CAS NUMBER
Polydimethylsiloxane....................63148-62-9

CALIFORNIA PROPOSITION 65: This product contains a chemical known to the State of California to cause cancer (Dichloromethane).

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

CANADIAN WHMIS CLASS: A, D2A

COMPONENT RCRA CLASSIFICATIONS: TOXIC

COMPONENT RCRA CODES: D003

CERCLA RQ VALUE (MINIMUM): 100
## SECTION 16 – OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS RATINGS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH: 3*</td>
<td>FLAMMABILITY: 0</td>
</tr>
<tr>
<td>REACTIVITY: 0</td>
<td></td>
</tr>
</tbody>
</table>


REASON FOR REVISION: Administrative change for new format. Periodic Review.

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

DISCLAIMER: TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED IN THIS MSDS IS ACCURATE OR IS OBTAINED FROM SOURCES BELIEVED TO BE ACCURATE. HOWEVER, NO LIABILITY, EXPRESSED OR IMPLIED, IS ASSUMED FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION CONTAINED HEREIN. BUYER ASSUMES LIABILITY IN ITS USE OF THE MATERIAL.