SAFETY DATA SHEET

1. Identification

Identification
Product name: CONTRAM(TM) MB1114

Additional identification
Chemical name: biocide

Recommended use and restriction on use
Recommended use: Not determined.
Restrictions on use: Not determined.

Details of the supplier of the safety data sheet
Supplier
Company Name: THE LUBRIZOL CORPORATION
Address: 29400 LAKELAND BOULEVARD
WICKLIFFE, OH 44092-2298
US
Telephone: (440)943-1200

Emergency telephone number:
FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1)703 527 3887, OR WITHIN USA 800 424 9300
(LUBRIZOL)

2. Hazard(s) identification

Hazard Classification

Health Hazards
Acute toxicity (Oral) Category 4
Serious Eye Damage/Eye Irritation Category 1
Skin sensitizer Category 1

Unknown toxicity
Acute toxicity, inhalation, vapor 42.3 %
Acute toxicity, inhalation, dust or mist 2.3 %

Label Elements:

Hazard Symbol:

Signal Word: Danger
Hazard Statement: Harmful if swallowed.
Causes serious eye damage.
May cause an allergic skin reaction.
Precautionary Statement:

Prevention: Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment.

Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse. Collect spillage.

Storage: Store in well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification: None identified.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS number</th>
<th>Percent by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamate</td>
<td>Confidential</td>
<td>40 - 50%</td>
</tr>
</tbody>
</table>

Trade secret information: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Ingestion: Rinse mouth. Call a POISON CENTER/doctor if you feel unwell.

Inhalation: Remove exposed person to fresh air if adverse effects are observed.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation or rash occurs: Get medical attention. Launder contaminated clothing before reuse.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Most important symptoms/effects, acute and delayed

Symptoms: See section 11.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: CO2, dry chemical, foam, water spray, water fog.

Unsuitable extinguishing media: Not determined.

Specific hazards arising from the chemical: Container may rupture on heating. See section 10 for additional information.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Recommend wearing self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment.

Methods and material for containment and cleaning up: Dike far ahead of larger spill for later recovery and disposal. Pick up free liquid for recycle and/or disposal. Residual liquid can be absorbed on inert material. Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas.

Environmental Precautions: Avoid release to the environment. Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not get in eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Avoid environmental contamination.

Maximum Handling Temperature: Not determined.

Conditions for safe storage, including any incompatibilities: Store away from incompatible materials. See section 10 for incompatible materials.

Maximum Storage Temperature: Not determined.
8. Exposure controls/personal protection

Control Parameters:

Occupational Exposure Limits
None of the components have assigned exposure limits.

Other exposure limits

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>type</th>
<th>Exposure Limit Values</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamate</td>
<td>TWA</td>
<td>0.25 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls:
Use material in well ventilated area only. No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Eye/face protection: Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

Skin Protection

Hand Protection: Suitable gloves can be recommended by the glove supplier. Use suitable protective gloves if risk of skin contact.

Other: Gloves, coveralls, apron, boots as necessary to minimize contact. Do not wear rings, watches or similar apparel that could entrap the material.

Respiratory Protection: A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites.

Hygiene measures: Observe good industrial hygiene practices. Do not eat, drink or smoke when using the product. Do not get in eyes. Avoid contact with skin. Wash hands after handling. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>Dispersion</td>
</tr>
<tr>
<td>Color:</td>
<td>White to yellow</td>
</tr>
<tr>
<td>Odor:</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor threshold:</td>
<td>No data available.</td>
</tr>
<tr>
<td>pH:</td>
<td>6.1 (10 g/l )</td>
</tr>
<tr>
<td>Freezing point:</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
Boiling Point: Approximate 212 °F (100 °C)
Flash Point: not applicable
Evaporation rate: No data available.
Flammability (solid, gas): No data available.
Upper/lower limit on flammability or explosive limits
   Flammability limit - upper (%): No data available.
   Flammability limit - lower (%): No data available.
Explosive limit - upper (%): No data available.
Explosive limit - lower (%): No data available.
Vapor pressure: No data available.
Vapor density: No data available.
Relative density: 1.268 °F (20 °C)
Solubility(ies)
   Solubility in water: Dispersible
   Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.
Decomposition temperature: No data available.
Viscosity: No data available.

10. Stability and reactivity
Reactivity: No data available.
Chemical Stability: Material is stable under normal conditions.
Possibility of hazardous reactions: Will not occur.
Conditions to avoid: Not determined.
Incompatible Materials: Strong acids.
Hazardous Decomposition Products: No data available.

11. Toxicological information
Information on likely routes of exposure
   Inhalation: No data available.
   Ingestion: Harmful if swallowed.
   Skin Contact: No data available.
   Eye contact: Causes serious eye damage.
Information on toxicological effects
   Acute toxicity
      Oral
         Product: LD 50 (Rat): 1,250 mg/kg (Supplier information)
      Dermal
         Product: LD 50 (Rat): > 2,000 mg/kg (Supplier information) Not classified
Inhalation
- **Product:**
  - High concentrations may cause headaches, dizziness, nausea, behavioral changes, drowsiness, stupor and blurred or halo vision.
  - Avoid inhalation of mists or vapors.
  - ATEmix (, 4 h): >5 mg/l. Dusts, mists and fumes

**Skin Corrosion/Irritation:**
- **Product:** Not classified as a primary skin irritant.

**Serious Eye Damage/Eye Irritation:**
- **Product:** Remarks: Causes serious eye damage.

**Respiratory sensitization:**
- No data available

**Skin sensitization:**
- **Carbamate:** Classification: May cause sensitization by skin contact.

**Specific Target Organ Toxicity - Single Exposure:**
- **Carbamate:** Respiratory tract irritation.

**Aspiration Hazard:**
- No data available

**Chronic Effects**
- **Carcinogenicity:** No data available

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:** No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:** No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):** No carcinogenic components identified

**Germ Cell Mutagenicity:**
- No data available

**Reproductive toxicity:**
- No data available

**Specific Target Organ Toxicity - Repeated Exposure:**
- No data available

### 12. Ecological information

**Ecotoxicity**
- **Fish**
  - **Carbamate**
    - LC 50 (Fathead Minnow, 4 d): 0.2 mg/l
    - LC 50 (Rainbow Trout, 4 d): 0.072 mg/l

- **Aquatic Invertebrates**
  - **Carbamate**
    - EC 50 (Water flea (Daphnia magna), 2 d): 0.16 mg/l
Toxicity to Aquatic Plants
Carbamate EC 50 (Alga, 5 d): 1 mg/l

Toxicity to soil dwelling organisms
No data available

Sediment Toxicity
No data available

Toxicity to Terrestrial Plants
No data available

Toxicity to Above-Ground Organisms
No data available

Toxicity to microorganisms
No data available

Persistence and Degradability
Biodegradation
No data available

Bioaccumulative Potential
Bioconcentration Factor (BCF)
No data available

Partition Coefficient n-octanol / water (log Kow)
Carbamate Log Kow: 2.88 (calculated)

Mobility:
No data available

Other Adverse Effects:
No data available.

13. Disposal considerations

Disposal instructions: Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Empty container contains product residue which may exhibit hazards of product.

Contaminated Packaging: Container packaging may exhibit hazards.

14. Transport information

DOT
UN Number: UN 3082
UN Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s.(3-Iodo-2-propynylbutylcarbamate)
Transport Hazard Class(es)
Class: 9
Label(s): 9
Packing Group: III
Marine Pollutant: Yes
Special precautions for user: None established
IMDG

UN Number: UN 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (3-iodo-2-propynylbutylcarbamate)

Transport Hazard Class(es):
Class: 9
Label(s): 9
EmS No.: F-A, S-F

Packing Group: III
Marine Pollutant: Yes
Limited quantity 5.00L

Exempted quantity E1
Special precautions for user: None established

IATA

UN Number: UN 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (3-iodo-2-propynylbutylcarbamate)

Transport Hazard Class(es):
Class: 9
Label(s): 9MI
Marine Pollutant: Yes
Packing Group: III
Limited quantity 30.00KG

Exempted quantity E1
Environmental Hazards Marine Pollutant
Special precautions for user: None established
Other information
Passenger and cargo aircraft: Allowed.
Cargo aircraft only: Allowed.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.

15. Regulatory information

US Federal Regulations
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate
(Acute) Health Hazards
SARA 302 Extremely Hazardous Substance
SARA 304 Emergency Release Notification
SARA 311/312 Hazardous Chemical
SARA 313 (TRI Reporting)
    This product may contain chemical(s) regulated under the Superfund Amendments and Reauthorization
    Act (SARA). Additional information can be received upon request.

US State Regulations
    US. California Proposition 65
        No ingredient regulated by CA Prop 65 present.

Inventory Status
    Australia (AICS)
        All components are in compliance with chemical notification requirements in Australia.
    Canada (DSL/NDSL)
        This product contains a substance that is not listed on the Canadian Domestic Substances List (DSL).
    China (IECSC)
        All components of this product are listed on the Inventory of Existing Chemical Substances in China.
    European Union (REACH)
        To obtain information on the REACH compliance status of this product, please e-mail
        REACH@SDSInquiries.com.
    Japan (ENCS)
        All components are in compliance with the Chemical Substances Control Law of Japan.
    Korea (ECL)
        This product requires notification before sale in Korea.
    New Zealand (NZIoC)
        All components are in compliance with chemical notification requirements in New Zealand.
    Philippines (PICCS)
        All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear
    Switzerland (SWISS)
        May require notification before sale in Switzerland.
    Taiwan (TCSCA)
        All components of this product are listed on the Taiwan inventory.
    United States (TSCA)
        This product is a registered pesticide regulated under the Federal Insecticide, Fungicide and Rodenticide
        Act (FIFRA). It may only be used in accordance with the provisions of the EPA approved product label in
        States that it is registered. This product may not be used for other applications since it is not on the TSCA
        inventory.

The information that was used to confirm the compliance status of this product may deviate from the chemical
information shown in Section 3.
16. Other information, including date of preparation or last revision

HMIS Hazard ID

Health * 2  
Flammability 0  
Physical Hazards 0  

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID

Flammability 0  
Health 0  
Reactivity 2  
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 12/15/2015
Version #: 1.1
Source of information: Internal company data and other publically available resources.
Further Information: Contact supplier (see Section 1)
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