



**Material Safety Data Sheet (MSDS)**  
**Bromac-c 0.25% Liquid**

**IDENTIFICATION OF THE SUPPLIER:**

**AGRO CHEMICALS INDUSTRIES LTD**  
**JORDAN AMMAN**  
**P.O.Box 183020 Amman 11118 Jordan**  
**Tel. +962 6 5548224/5**  
**Fax. +962 6 5548220**  
**E-mail [info@aci.com.jo](mailto:info@aci.com.jo)**

**PRODUCT IDENTIFICATION:**

**Common Name:** Bromadiolone 0.25% w/w  
**Trade Name:** Bromac-c 0.25% Liquid  
**Formulation type:** Liquid  
**Chemical Name:** 3-(3-(4-bromobiphenyl-4-yl)-3-hydroxy-1-phenylpropyl)-4-hydroxycoumarin.  
**Chemical Formula:** C<sub>30</sub>H<sub>23</sub>BrO<sub>4</sub>  
**Molecular Weight:** 527.4

**PRODUCT COMPOSITION:**

<b>Active Ingredient:</b>	<b>% w/w</b>	<b>CAS #</b>
Bromadiolone	0.25 %	[28772-56-7]

**Inert ingredient:**  
Up to 1 liter

**HAZARDS IDENTIFICATION:**

Emergency Overview: May be harmful if swallowed or absorbed through the skin, because this material may reduce the clotting ability of the blood and cause bleeding.

Primary Entry Routes: Oral (swallowing), dermal (absorption through skin)



Acute Effects (Signs and Symptoms of Overexposure):

- Eyes: May cause temporary eye irritation.
  - Skin: May be harmful if absorbed through skin. Symptoms of toxicity include lethargy, loss of appetite, reduced blood clotting ability and bleeding.
  - Inhalation: Due to this product's solid form, inhalation is unlikely.
  - Ingestion: May be harmful if swallowed. Symptoms of toxicity include lethargy, loss of appetite, reduced clotting ability of blood, and bleeding.
- Chronic Effects: Prolonged and/or repeated exposure to small amounts of product can produce cumulative toxicity. Symptoms of toxicity include lethargy, loss of appetite, reduced clotting ability of blood, and bleeding.
- Medical Conditions Aggravated by Exposure: Bleeding disorders
- Target Organs: Blood
- Carcinogenicity: Contains no known or suspected carcinogens.
- HMIS: Health – 2, Flammability – 0, Reactivity – 0

### **FIRST-AID MEASURES:**

**EYE CONTACT:** Flush with cool water for at least 15 minutes. If irritation develops, obtain medical assistance.

**SKIN CONTACT:** Wash with soap and water. If irritation develops, obtain medical assistance.

**INHALATION:** Remove to fresh air. Consult a physician

**INGESTION:** Call physician or emergency number immediately.

**SYMPTOMS:** Ingestion of excessive quantities may cause nausea, vomiting, loss of appetite, extreme thirst, lethargy, diarrhea, bleeding.

**ADVICE TO PHYSICIAN:** If ingested, administer Vitamin K1 intramuscularly or orally as indicated by bishydroxycoumarin overdoses. Repeat as necessary as based upon monitoring of prothrombin times.

### **FIRE-FIGHTING MEASURES: -**

**Flash Point:** None

**Autoignition Temp.:** Not determined

**Explosive Limits:** LEL: Not applicable

**UEL:** Not applicable

**Extinguishing Media:** Use media suitable for the surrounding fire

Unusual Fire or None known

**Explosion Hazards:**

Fire Fighting Firefighters should wear self-contained breathing





**Instructions:** apparatus (full facepiece) and full protective clothing. Contain runoff to prevent pollution.

### **ACCIDENTAL RELEASE:**

**Large Spill/Leak Procedures:** Isolate and contain spill. Limit access to the spill area to necessary personnel. Do not allow spilled material to enter sewers, streams or other waters. Scoop up spilled material and place in a closed, labeled container for use or disposal.

**Small Spills:** Scoop up material for use according to label instructions.

### **PERSONAL PROTECTION/SAFTETY:**

#### **General Protection:**

Follow all label instructions. Train employees in safe use of the product. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.

#### **Eye/Face Protection:**

Tightly fitting safety goggles

#### **Hand Protection:**

Waterproof gloves.

#### **Body Protection:**

Wear long-sleeved shirt and long pants and shoes plus socks.

#### **Respiratory Protection:**

When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

### **HANDLING AND STORAGE:**

#### **STORAGE AND HANDLING**

**Storage Requirements:** Store in original container in a cool, dry area out of reach of children, pets and domestic animals. Do not contaminate water, food or feed. Keep container tightly closed. Do not remove or destroy the product label.

**Handling Precautions:** Read the entire product label before using this rodenticide. Carefully follow all cautions, directions and use restrictions on the label. Avoid contact with eyes, skin or clothing.



## STABILITY AND REACTIVITY

**Stability:** Stable

**Conditions to Avoid:** None

**Hazardous Polymerization:** Will not occur

**Chemical Incompatibilities:** Alkaline materials

**Hazardous Products of Decomposition:** Oxides of carbon

## TOXICOLOGICAL INFORMATION:

**Toxicity as Technical:**

**Toxicity class WHO (a.i.) Ia; EPA (formulation) I**

**Oral Acute oral LD50** for rats 1.125, mice 1.75, rabbits 1.00, dogs >10.0, cats >25.0 mg/kg.

**Skin and eye Acute percutaneous LD50** for rabbits 1.71 mg/kg.

**Inhalation LC50** 0.43 µg/l.

**NOEL** In 90 d feeding trials on rats and dogs, the only effect noted was reduction in prothrombin rating.

## ECOLOGICAL INFORMATION: -

As technical:

Soil/Environment Leaching behavior is inversely related to clay and organic matter content of soils. In soil column and soil layer studies, the proportion of bromadiolone remaining in the top soil layer, using aged loamy sand soil (8.8% clay, 1.05% o.m.) was 97%, with 0.1% in leachate.

## DISPOSAL:

Disposal: Wastes resulting from the use of this product according to the label instructions must be disposed of as specified on the product label.

