



# MATERIAL SAFETY DATA SHEET

MIMIC 2LV INSECTICIDE  
BIO-0615rev.0

Date: 2/23/11

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Mimic 2LV Insecticide

COMPANY IDENTIFICATION:  
Valent BioSciences Corporation  
870 Technology Road  
Libertyville, IL 60048

EMERGENCY TELEPHONE NUMBER:  
1-877-315-9819

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

No		CAS REG NO	WEIGHT (%)
1	RH-5992 (Tebufenozide) .....	112410-23-8	23-25
2	Glycerol .....	56-81-5	75-77
3	Related reaction products .....	None	
4	Alkylaryl polyether alcohol .....	Trade Secret	
5	Oils, glyceridic, canola .....	120962-03-0	
6	Water .....	7732-18-5	

See Section 8, Exposure Controls / Personal Protection

## 3. HAZARDS IDENTIFICATION

Primary Routes of Exposure

- Inhalation
- Skin Contact
- Eye Contact

Inhalation

Inhalation of vapor or mist is possibly harmful.

Eye Contact

Direct contact with material can cause the following: possible irritation

Skin Contact

Prolonged or repeated skin contact can cause the following: slight skin irritation

Delayed Effects

- Repeated overexposure to the active ingredient in this material can cause the following:
- adverse reproductive effects - blood changes



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### 4. FIRST AID MEASURES

#### Inhalation

Move subject to fresh air.

#### Eye Contact

Flush eyes with a large amount of water for at least 15 minutes. Consult a physician if irritation persists.

#### Skin Contact

Wash affected skin areas thoroughly with soap and water. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered. Consult a physician if irritation persists.

#### Ingestion

If swallowed, give 2 glasses of water to drink. Never give anything by mouth to an unconscious person. Consult a physician.

#### Note to Physician

If swallowed, careful evacuation of the stomach is advisable.

### 5. FIRE FIGHTING MEASURES

Flash Point .....	Noncombustible
Auto-ignition Temperature .....	No Data
Lower Explosive Limit .....	Not Applicable
Upper Explosive Limit .....	Not Applicable

#### Unusual Hazards

Pesticide particulates can become airborne.

#### Extinguishing Agents

Use the following extinguishing media when fighting fires involving this material: carbon dioxide – dry chemical - water spray

#### Personal Protective Equipment

Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

#### Special Procedures

Contain run-off. Remain upwind. Avoid breathing smoke. Use water spray to cool containers exposed to fire.



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**6. ACCIDENTAL RELEASE MEASURES**

Personal Protection

Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow. Remove all contaminated clothing promptly. Wash all exposed skin areas with soap and water immediately after exposure. Thoroughly launder clothing before reuse. Do not take clothing home to be laundered.

Procedures

Floor may be slippery; use care to avoid falling. Contain spills immediately with inert materials (e.g. sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

**7. HANDLING AND STORAGE**

Storage Conditions

The minimum recommended storage temperature for this material is 0C/32F. The maximum recommended storage temperature for this material is 50C/122F. Do not store this material near food, feed or drinking water. Keep container tightly closed when not in use.

Handling Procedures

Do not handle material near food, feed or drinking water.

Other

Triple rinse (or equivalent) and puncture empty container. Dispose empty container in a sanitary landfill or by incineration as allowed by state and local authorities. Avoid inhalation of smoke if incinerated.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Exposure Limit Information

No	CAS REG NO	WEIGHT (%)
1 RH-5992 (Tebufenozide) .....	112410-23-8	23-25
2 Glycerol .....	56-81-5	75-77
3 Related reaction products .....	None	
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Comp. No.	Units	Valent BioSciences		OSHA		ACGIH	
		TWA	STEL	TWA	STEL	TWA	STEL
1	mg/m3	1.3	None	None	None	None	None
2	mg/m3	None	None	10 Mist	None	10 Mist	None
3		None	None	None	None	None	None
4		None	None	None	None	None	None
5		None	None	None	None	None	None
6		None	None	None	None	None	None

## Respiratory Protection

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in 'Exposure Limit Information'.

**Up to 10 times the exposure limit:** Wear a MSHA/NIOSH approved (or equivalent) half-mask, air-purifying respirator.

**Up to 100 times the exposure limit:** Wear a MSHA/NIOSH approved (or equivalent) full-face piece, airpurifying respirator, OR full-face piece, airline respirator in the demand mode.

**Above 100 times the exposure limit or Unknown:** Wear a MSHA/NIOSH approved (or equivalent) selfcontained breathing apparatus in the pressure demand mode, OR MSHA/NIOSH approved (or equivalent) full-face piece, airline respirator in the pressure demand mode with emergency escape provision.

Air-purifying respirators should be equipped with MSHA/NIOSH approved (or equivalent) cartridges for protection against pesticides.

## Eye Protection

Use chemical splash goggles (ANSI Z87.1 or approved equivalent).

## Hand Protection

Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection: Nitrile - Butyl/Neoprene rubber. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

## Other Protection

Use chemically resistant apron or other impervious clothing to avoid prolonged or repeated skin contact.



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Engineering Controls (Ventilation)

Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Color .....	Off-white, cream color
State .....	Liquid
Odor Characteristic .....	Mild odor
pH .....	6.5 to 7.5
Viscosity .....	1000 to 1500 CPS
Specific Gravity (Water = 1) .....	1.0
Vapor Density (Air = 1) .....	< 1 Water
Vapor Pressure .....	17 mm Hg @ 20°C/68°F Water
Melting Point .....	-9°C/15°F
Boiling Point .....	100°C/212°F Water
Solubility in Water .....	Dispersible
Percent Volatility .....	60% Approximate
Evaporation Rate (BAc = 1) .....	< 1 Water

See Section 5, Fire Fighting Measures

**10. STABILITY AND REACTIVITY**

Instability

This material is considered stable.

Hazardous Decomposition Products

Thermal decomposition may yield the following: isobutylene

Hazardous Polymerization

Product will not undergo polymerization.

Incompatibility

Avoid contact with strong oxidizing agents.

## 11. TOXICOLOGICAL INFORMATION

### Acute Data

No toxicity data are available for this material.  
Toxicity data for a compositionally similar material are listed below.

Oral LD50 - rat: >5000 mg/kg  
Dermal LD50 - rat: >5000 mg/kg  
Skin Irritation - rabbit: slight irritation  
Eye irritation - rabbit: inconsequential irritation  
Inhalation LC50 - rat: >2.7 mg/L for 4 hr

### Subchronic/Chronic Data

The following data pertains to studies conducted with the technical material, 97% active ingredient: In thirteen-week dietary studies in rats, mice and dogs, the observed NOEL was 200 ppm (10 mg/kg/day), 20 ppm (3 mg/kg/day) and 50 ppm (1.7 mg/kg/day), respectively. The hemopoietic system is the target organ of toxicity in these species.

### Mutagenicity Data

The following data pertains to studies conducted with the technical material, 97% active ingredient:

Ames mutagenicity: Negative  
Mammalian Point Mutation: Negative  
In vitro cytogenetic assay (Chinese hamster ovary cells): Negative  
In vivo cytogenetic assay (rat): Negative  
In vitro rat hepatocyte Unscheduled DNA Synthesis: Negative

### Reproductive/Teratology Data

The following data pertains to studies conducted with the technical material, 97% active ingredient:

No developmental toxic effects were observed in rats nor rabbits when studied up to and including 1000 mg/kg/day.

Slight reproductive effects were observed at a high dose (2000 ppm) in a rat two-generation reproduction study; the NOEL for reproductive effects was 150 ppm (7.5 mg/kg/day).



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### 12. ECOLOGICAL INFORMATION

#### Environmental Toxicity

Bluegill sunfish (*Lepomis macrochirus*), 96 Hour LC50: 3.0 mg/l  
Rainbow trout (*Salmo gairdneri*), 96 Hour LC50: 5.7 mg/l  
Daphnia magna, 48 Hour EC50: 3.8 mg/l  
Bobwhite quail, LD50: > 2150 mg/kg  
Bobwhite quail, LC50: > 5000 ppm  
Mallard duck, LC50: > 5000 ppm  
Honeybee, LD50: > 234 µg/bee  
Earthworm, 14 Day LC50: > 1000 mg/kg  
Oyster shell (*Crassostrea virginica*), Deposition EC50: 0.64 mg/l

The above Environmental Toxicity data are from studies conducted on the technical material, 97% active ingredient.

### 13. DISPOSAL CONSIDERATIONS

#### Procedure

Incinerate liquid and contaminated solids in accordance with local, state, and federal regulations.

### 14. TRANSPORT INFORMATION

US DOT Hazard Class ..... NON-REGULATED

### 15. REGULATORY INFORMATION

#### Workplace Classification

This product is considered hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200). This product is subject to regulation under the Canadian Pest Control Products Act (P.C.P. Act). Therefore, this product is excluded from the supplier labeling and material safety data sheet requirements as specified in Section 12 of the Hazardous Products Act.

#### SARA TITLE 3: Section 311/312 Categorizations (40 CFR 370)

This product is a hazardous chemical under 29 CFR 1910.1200, and is categorized as a delayed health hazard.

#### SARA TITLE 3: Section 313 Information (40 CFR 372)

This product does not contain a chemical, which is listed in Section 313 at or above de minimis concentrations.



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### CERCLA Information (40 CFR 302.4)

This material contains no hazardous or extremely hazardous substances as defined by CERCLA or SARA Title III, and releases are therefore not reportable.

### Waste Classification

When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40 CFR 261.33. The toxicity characteristic (TC), however, has not been evaluated by the Toxicity Characteristic Leaching Procedure (TCLP).

### United States

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

### MSDS STATUS: New

The information and recommendations contained herein are based upon tests believed to be reliable. However, Valent BioSciences does not guarantee their accuracy or completeness nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. Adjustment to conform with actual conditions of usage may be required. Valent BioSciences assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of these data. No freedom from infringement of any patent, copyright or trademark is to be inferred.



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