

## Safety Data Sheet

### Section 1: Product & Company Identification

<b>Product Name:</b>	Bicyclomycin Benzoate
<b>Product #:</b>	B-2551
<b>Synonyms:</b>	FR2054; 3'-benzoate bicyclomycin
<b>Supplier:</b>	AG Scientific Holdings, LLC 9950 Scripps Lake Drive, Suite 104 San Diego, CA 92131 Tele# + 858-452-9925
<b>Emergency Tele#:</b>	ChemTel, Tele# in USA 1-800-255-3924, International 1-813-248-0585

### Section 2: Composition / Information on Ingredients

Component	CAS #	EC #	% Composition
Bicyclomycin Benzoate	37134-40-0		≥95

### Section 3: Hazards Identification

<b>Symbols</b>	
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#### HMIS Rating

Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
3		0	0

#### NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
4	0	0

### Section 4: First Aid Measures

<b>General Overview:</b>	Immediately remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration.
<b>Inhalation:</b>	In case of unconsciousness place patient stably in side position for transportation.
<b>Skin:</b>	Immediately wash with water and soap and rinse thoroughly.

<b>Eyes:</b>	Rinse opened eyes for several minutes under running water. Then consult a doctor.
<b>Ingestion:</b>	Do not induce vomiting; immediately call for medical help.
	See section 11 for more detailed information on health effects & symptoms.

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	Product is not flammable
<b>Extinguishing Media:</b>	Use firefighting measures that suit the environment. A solid water stream may be inefficient.
<b>Hazardous thermal (de)composition products:</b>	No data available
<b>Special Fire Fighting Procedures:</b>	No special measures required.
<b>Flash Point:</b>	N/A

## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Not required.
<b>Environmental Precautions:</b>	Do not allow to enter sewers/surface or ground water.
<b>Methods for Clean-up:</b>	Dispose contaminated material as waste according to Section 13.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Recommended storage temperature: -20°C
<b>Handling:</b>	Thorough dedusting.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>Not required.</p>
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<b>Skin and Body:</b>	  <p>Protective gloves and lab coat. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p>
<b>Eyes:</b>	 <p>Not required.</p>
<b>Ventilation/Engineering Measures:</b>	<p>Ensure adequate ventilation.</p>
<b>Hygiene:</b>	<p>Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.</p>
<b>Other:</b>	<p>Contains no substances with occupational exposure limit values.</p>

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	<p>Solid. Characteristic odor.</p>
<b>Formula</b>	<p><math>C_{19}H_{22}N_2O_8</math></p>
<b>Molecular Wt.</b>	<p>406.4</p>
<b>Melting Pt.</b>	<p>No data available</p>
<b>Boiling Pt.</b>	<p>No data available</p>
<b>Density:</b>	<p>No data available</p>
<b>Vapor Pressure:</b>	<p>No data available</p>
<b>Evaporation Rate:</b>	<p>No data available</p>
<b>Vapor Density:</b>	<p>No data available</p>
<b>Solubility:</b>	<p>DMF, DMSO, Ethanol, Methanol</p>
<b>Flash Point:</b>	<p>No data available</p>
<b>Autoignition Temp:</b>	<p>No data available</p>

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Carbon dioxide, carbon monoxide, nitrogen oxides
<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	No data available

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	N/A
<b>ACUTE Toxicity:</b>	N/A
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	<p>IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.</p> <p>AGGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH.</p> <p>NTP: No component of this product present at levels greater than or equal to 0.1% is identified as known or anticipated human carcinogen by NTP.</p> <p>OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as known or potential human carcinogen by OSHA.</p> <p>EPA: No classification on carcinogenic data is available from EPA</p>

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	Water hazard class 1 (Self-assessment): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
<b>Mobility:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential:</b>	No data available
<b>Other adverse effects:</b>	No data available
<b>Corrosivity Characteristic:</b>	No data available
<b>General Notes:</b>	No data available

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
<b>Contaminated Packaging:</b>	Disposal must be made according to official regulations.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	UN2811
<b>ADR / RID (LAND):</b>	
<b>DOT regulations:</b>	<p>UN2811            Toxic solid, organic, n.o.s. (Bicyclomycin Benzoate)            Class 6.1 Toxic substances            Label 6.1            Packing group: I</p> <p>On passenger aircraft/rail: 5 kg            On cargo aircraft only: 50 kg</p>
<b>IMDG/IMO (SEA):</b>	<p>TOXIC SOLID, ORGANIC, N.O.S. (Bicyclomycin Benzoate)            Class 6.1 Toxic substances            Label 6.1            Packing group: I</p> <p>Limited quantities (LQ) 0            Excepted quantities (EQ) Code: E5            Maximum net quantity per inner packaging: 1 g            Maximum net quantity per outer packaging: 300 g</p>
<b>IATA/DGR (AIR):</b>	<p>UN2811            Toxic solid, organic, n.o.s. (Bicyclomycin Benzoate)            Class 6.1 Toxic substances            Label 6.1            Packing group: I</p> <p>Remarks: When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.</p>
<b>Special Provisions:</b>	<p>Warning: Toxic substances            Hazard Identification Number (Kemler code): 66            EMS Number: F-A,S-A            Stowage Category: B</p>

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	Danger!
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	H300 Fatal if swallowed.
<b>Risk Phrases:</b>	P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product.
<b>Safety Phrases:</b>	P301+P310 If swallowed: Immediately call a poison center/doctor. P321 Specific treatment (see on this label). P330 Rinse mouth. P405 Store locked up. P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA: Not listed California Proposition 65: No products were found
<b>U.S. Federal Regulations:</b>	SARA 302/304 emergency planning and notification: No products were found. SARA 311/312 MSDS distribution-chemical inventory-hazard identification: No products were found. SARA 313 toxic chemicals notification and release reporting: No products were found.  Clean Water Act (CWA) 307: No products were found. Clean Water Act (CWA) 311: No products were found. Clean Air Act (CAA) 112 accidental release prevention: No products were found. Clean Air Act (CAA) 112 regulated flammable substances: No products were found. Clean Air Act (CAA) 112 regulated toxic substances: No products were found. OSHA: Acute toxicity - oral (Cat. 2)
<b>WHMIS (Canada):</b>	N/A

## SECTION 16: Other Information

**LIABILITY STATEMENT:** *The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. AG Scientific shall not be held liable for any damages resulting from handling or from contact with the above product. AG Scientific products are for research purposes only. Not for human use or consumption.*