
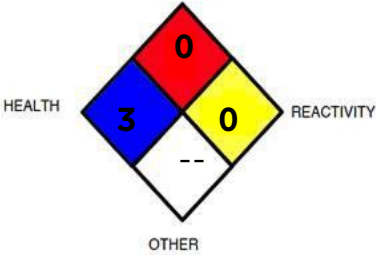
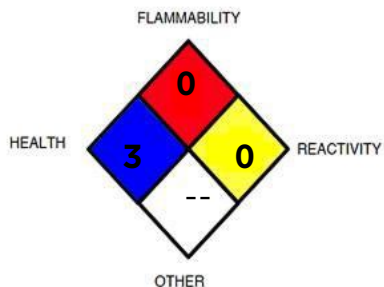


## Safety Data Sheet

Section 1: Product & Company Identification	
<b>Product Name:</b>	Chromomycin A3
<b>Product #:</b>	C-1023
<b>Synonyms:</b>	Aburamycin B, Antibiotic 69895 A , Antibiotic B 599 , NSC-58514, Olivomycin D, 3B-O-(4-O-acetyl-2,6-dideoxy-3-C-methyl-alpha-L-arabinohexopyranosyl)-7-methyl- , Toyomycin
<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 #	%	HCS Classification
Chromomycin A3	7059-24-7	230-349-0	≥95%	Acute Toxicity, Oral (Cat. 2) Reproductive toxicity (Cat. 1B)

Section 3: Hazards Identification	
<b>Symbols</b>	
<b>HMIS Classification</b>	<p>FLAMMABILITY</p> <p>HEALTH</p> <p>REACTIVITY</p> <p>OTHER</p> 

<b>NFPA Classification</b>	
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## Section 4: First Aid Measures

<b>General Overview:</b>	Avoid contact, wear suitable protective clothing, gloves and eye/face protection.
<b>Inhalation:</b>	If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing give artificial respiration, seek medical attention.
<b>Skin:</b>	Wash immediately with water for 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. Seek medical attention if symptoms appear.
<b>Eyes:</b>	In case of contact, immediately flush eyes or skin with copious amounts of water for at least 15 minutes. Remove contacts. Assure adequate flushing of the eyes by separating the eyelids with fingers.
<b>Ingestion:</b>	If swallowed, DO NOT induce vomiting. Wash mouth with water, never give anything to unconscious person. Seek medical attention.
	See section 11 for more detailed information on health effects & symptoms

## SECTION 5: Fire Fighting Measures

<b>Flammability of the product:</b>	N/A
<b>Extinguishing Media:</b>	Dry Chemical Powder for SMALL FIRES and carbon dioxide or water spray, fog or foam for LARGE FIRES. Do not use water jet.
<b>Hazardous thermal (de)composition products:</b>	Carbon oxides Nitrogen oxides
<b>Special Fire Fighting Procedures:</b>	Wear self-contained breathing apparatus (SCBA) and protective clothing to prevent contact with skin and eyes. Be sure to use an approved/certified respirator or equivalent.
<b>Flash Point:</b>	N/A

## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Use Personal Protection Equipment. Splash goggles. Gloves. Avoid dust formation.
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<b>Environmental Precautions:</b>	Do not let product enter drains.
<b>Methods for Clean-up:</b>	Sweep up & shovel into suitable disposal container. Ventilate area and wash spill site after material pickup is complete.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Store at +4°C. Keep container tightly closed and in cool, dry, well ventilated area.
<b>Handling:</b>	Use only in area provided with appropriate exhaust ventilation. Keep away from heat and source of ignition. Empty containers pose a fire risk, evaporate residue under fume hood. Ground all equipment containing material. Do not breathe dust.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	 <p>Where risk assessment shows air-purifying respirators are appropriate, use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).</p>
<b>Skin and Body:</b>	  <p>Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices, and wash and dry hands. Wear protective clothing. Choose body protection according to the amount and concentration of the dangerous substance at the workplace. When deemed needed according to the concentration and amount of this product, use a complete body suit.</p>

<b>Eyes:</b>	 <p>Use a face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).</p>
<b>Ventilation/Engineering Measures:</b>	Ventilation system
<b>Hygiene:</b>	Showers, eyewash stations. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Use fumehood for routine work.
<b>Other:</b>	The employer/end user, prior to use of this product should perform all recommendations below are advisory in nature and a risk assessment. The type of protective equipment must be selected based on the amount and concentration of the dangerous material being used in the workplace.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Yellow Solid
<b>Formula</b>	$C_6H_{12}O_6$
<b>Molecular Wt.</b>	1183.3
<b>Melting Pt.</b>	175°C-185°C
<b>Boiling Pt.</b>	N/A
<b>Density:</b>	N/A
<b>Vapor Pressure:</b>	N/A
<b>Evaporation Rate:</b>	N/A
<b>Vapor Density:</b>	N/A
<b>Solubility:</b>	DMSO, ethanol, petrol ether. Insoluble in water.
<b>Flash Point:</b>	N/A
<b>Autoignition Temp:</b>	N/A

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under proper storage conditions
<b>Hazardous decomposition products:</b>	Carbon oxides Nitrogen oxides

<b>Materials to Avoid:</b>	Strong oxidizing agents
<b>Conditions to avoid:</b>	Fire

## SECTION 11: Toxicological Information

<b>RTECS#:</b>	GB7875000
<b>ACUTE Toxicity:</b>	Highly Toxic (USA) Very Toxic (EU). May cause harm to the unborn child. Very toxic if swallowed. LD <sub>50</sub> : 1.4 mg/kg (mouse, oral). Human, HeLa cell, Mutation test: DNA damage, Dose: 400 UG/L
<b>CHRONIC Toxicity:</b>	N/A
<b>Chronic Exposure:</b> <b>Carcinogen:</b> <b>Mutagen:</b> <b>Teratogen:</b> <b>Reproductive:</b>	Reproductive: May cause harm to the unborn child human reproductive toxicant 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. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, potential human carcinogen by ACGIH. 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. 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. EPA: No classification on carcinogenic data is available from EPA

## SECTION 12: Ecological Information

<b>Ecotoxicity:</b>	N/A
<b>Mobility:</b>	N/A
<b>Persistence and degradability:</b>	N/A
<b>Bioaccumulative potential:</b>	N/A
<b>Other adverse effects:</b>	N/A
<b>Corrosivity Characteristic:</b>	N/A
<b>General Notes:</b>	Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewer system. Do not allow materials to be released into the environment without proper government permits.

## SECTION 13: Disposal Considerations

<b>Residue Waste or Unused product:</b>	Only professional staff trained in such techniques must undertake waste disposal. Observe all appropriate federal, provincial, or state and local regulations.
<b>Contaminated Packaging:</b>	Do not re-use empty containers. Dispose of as unused product.

## SECTION 14: Transportation Information

<b>UN ID#:</b>	UN3462
<b>ADR / RID (LAND):</b>	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D) Class 6.1 Packing I
<b>DOT regulations:</b>	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D) Class 6.1 Packing I
<b>IMDG/IMO (SEA):</b>	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D) Class 6.1 Packing I
<b>IATA/DGR (AIR):</b>	TOXINS, EXTRACTED FROM LIVING SOURCES, SOLID, N.O.S. (3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D) Class 6.1 Packing I
<b>Special Provisions:</b>	N/A

## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	H300 Fatal if swallowed H360 May damage fertility or the unborn child
<b>Risk Phrases:</b>	R61: May cause harm to the unborn child R28: Very toxic if swallowed
<b>Safety Phrases:</b>	P201+ P202 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product P281 Use personal protective equipment as required P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P321 Specific treatment (see supplemental first aid instructions in this document) P330 Rinse mouth. P405 Store locked up P501 Dispose of contents/ container to an approved waste disposal plant.

	S53-28-36/37/39-45: Avoid exposure - obtain special instructions before use. After contact with skin, wash immediately with plenty of water. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	TSCA. No products were found. California Proposition 65: Presumed human reproductive toxicant Pennsylvania Right To Know Components 3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D, CAS-No.7059-24-7 New Jersey Right To Know Components 3D-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl- $\alpha$ -L-arabino-hexopyranosyl)-7-methylolivomycin D, CAS-No.7059-24-7
<b>U.S. Federal Regulations:</b>	SARA 302/304/311/312 extremely hazardous substances: No products were found SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: 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: Highly toxic by ingestion
<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.*