

## Safety Data Sheet

### Section 1: Product & Company Identification

<b>Product Name:</b>	Florfenicol
<b>Product #:</b>	F-2433
<b>Synonyms:</b>	SCH 25298
<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
Florfenicol	73231-34-2	642-986-0	≥98

### Section 3: Hazards Identification

#### Symbols



#### HMIS Rating

Health Hazard	Chronic Health Hazard	Flammability	Physical Hazard
2		0	0

#### NFPA Rating

Health Hazard	Fire Hazard	Reactivity Hazard
3	0	0

### Section 4: First Aid Measures

<b>General Overview:</b>	Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
<b>Inhalation:</b>	Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in side position for transportation.

<b>Skin:</b>	Generally, the products does not irritate the skin.
<b>Eyes:</b>	Rinse opened eyes for several minutes under running water.
<b>Ingestion:</b>	Immediately call a doctor.
	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 fire-fighting measures that suit the environment. A solid water stream may be inefficient.
<b>Hazardous thermal (de)composition products:</b>	No further relevant information available.
<b>Special Fire Fighting Procedures:</b>	Mouth respiratory protective device.
<b>Flash Point:</b>	No data available


## Section 6: Accidental Release Measures




<b>Personal Precautions:</b>	Not required.
<b>Environmental Precautions:</b>	Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/surface or ground water.
<b>Methods for Clean-up:</b>	Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation.

## SECTION 7: Handling & Storage

<b>Storage:</b>	Thorough dedusting. Ensure good ventilation/exhaustion at the workplace. Recommended storage temperature: -20°C
<b>Handling:</b>	No special measures required.

## SECTION 8: Exposure controls / Personal Protection

<b>Respiratory Protection:</b>	
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	In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
<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>Tightly sealed goggles.</p>
<b>Ventilation/Engineering Measures:</b>	Ensure adequate ventilation.
<b>Hygiene:</b>	Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.
<b>Other:</b>	Contains no substances with occupational exposure limit values.

## SECTION 9: Physical and Chemical Properties

<b>Appearance &amp; Odor:</b>	Solid. Characteristic odor.
<b>Formula</b>	$C_{12}H_{14}Cl_2FNO_4S$
<b>Molecular Wt.</b>	358.2
<b>Melting Pt.</b>	No data available
<b>Boiling Pt.</b>	No data available
<b>Density:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Evaporation Rate:</b>	No data available

<b>Vapor Density:</b>	No data available
<b>Solubility:</b>	DMF (30 mg/mL); DMSO (50 mg/mL); DMSO:PBS [pH 7.2] [1:30] (0.03 mg/mL)
<b>Flash Point:</b>	No data available
<b>Autoignition Temp:</b>	No data available

## SECTION 10: Stability and Reactivity

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Hazardous decomposition products:</b>	Nitrogen oxides, phosgene, hydrogen sulfide, hydrogen sulfide, hydrogen fluoride, carbon dioxide, carbon monoxide
<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 3 (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. Also poisonous for fish and plankton in water bodies. Very toxic for aquatic organisms
<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>	Very toxic for fish.

## 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>	UN3077
<b>ADR / RID (LAND):</b>	
<b>DOT regulations:</b>	Environmentally hazardous substance, solid, n.o.s. (Florfenicol) Class 9 Miscellaneous dangerous substances and articles Label 9 Packing Group: III  Quantity limitations On passenger aircraft/rail: 400 kg On cargo aircraft only: 400 kg
<b>IMDG/IMO (SEA):</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Florfenicol) Class 9 Miscellaneous dangerous substances and articles Label 9 Packing Group: III  Limited quantities (LQ) 5 kg Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
<b>IATA/DGR (AIR):</b>	Environmentally hazardous substance, solid, n.o.s. (Florfenicol) Class 9 Miscellaneous dangerous substances and articles Label 9 Packing Group: III  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.
<b>Special Provisions:</b>	Warning: Miscellaneous dangerous substances and articles

	<p>Hazard identification number (Kemler code): 90          EMS Number: F-A,S-F          Stowage Category: A          Stowage Code: SW23 When transported in BK3 bulk container, see 7.6.2.12 and 7.7.3.9.</p>
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## SECTION 15: Regulatory Information

<b>Health Phrases:</b>	<p>Danger!          H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.          H361 Suspected of damaging fertility or the unborn child.          H372 Causes damage to organs through prolonged or repeated exposure.          H410 Very toxic to aquatic life with long lasting effects.</p>
<b>Risk Phrases:</b>	<p>P201 Obtain special instructions before use.          P202 Do not handle until all safety precautions have been read and understood.          P260 Do not breathe dust/fume/gas/mist/vapors/spray.          P264 Wash thoroughly after handling.          P270 Do not eat, drink or smoke when using this product.          P271 Use only outdoors or in a well-ventilated area.          P273 Avoid release to the environment.          P280 Wear protective gloves/protective clothing/eye protection/face protection.</p>
<b>Safety Phrases:</b>	<p>P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.          P330 Rinse mouth.          P302+P352 If on skin: Wash with plenty of water.          P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.          P308+P313 IF exposed or concerned: Get medical advice/attention.          P321 Specific treatment (see on this label).          P314 Get medical advice/attention if you feel unwell.          P362+P364 Take off contaminated clothing and wash it before reuse.          P391 Collect spillage.          P405 Store locked up.          P501 Dispose of contents/container in accordance with local/regional/national/international regulations.</p>
<b>EU Regulations:</b>	N/A
<b>US Regulations:</b>	<p>TSCA: Not listed          California Proposition 65: Not listed</p>
<b>U.S. Federal Regulations:</b>	<p>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.</p>

	<p>Clean Water Act (CWA) 311: No products were found.</p> <p>Clean Air Act (CAA) 112 accidental release prevention: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated flammable substances: No products were found.</p> <p>Clean Air Act (CAA) 112 regulated toxic substances: No products were found.</p> <p>OSHA: Toxic to reproduction (Cat. 2); Specific target organ toxicity - repeated exposure (Cat. 1); Aquatic acute toxicity (Cat. 1); Aquatic chronic toxicity (Cat. 1); Acute toxicity - oral (Cat. 4); Acute toxicity - dermal (Cat. 4); Acute toxicity - inhalation (Cat. 4)</p>
<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.*