



SAFETY DATA SHEET

Revision Date: 24.04.2012

MSDS_EU/ANSI/EN/150000100865/Version 1.0

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name	FutureChem (R) AgSIP
Product Identification Number(s)	70121, E701210S
MSDS Prepared by	Product Safety and Health
Chemical Name	5-Sulfoisophthalic Acid, Silver Salt
Synonym(s)	not applicable
Molecular Formula	not applicable
Molecular Weight	not applicable
Product Use	research and development sample

Relevant identified uses of the substance or mixture and uses advised against

Identified uses	research and development sample
Uses advised against	No data.

Details of the supplier of the safety data sheet

Manufacturer/Supplier	FutureFuel Chemical Company Gap Road 2800 Batesville, AR 72503 US E-mail address: ProductSafety@ffcmail.com
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For product information telephone FutureFuel Chemical Company 870-698-3000, 8:00 am - 4:00 pm, Central.

Emergency telephone CHEMTREC: US 800-424-9300, international 703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xi: Irritant.

R-Phrases

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R41 Risk of serious damage to eyes.
R37 Irritating to respiratory system.
R43 May cause sensitization by skin contact.

S Phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Classification according to Regulation (EU) 1272/2008 with the correlation table 67/548/EEC or 1999/45/EC (Annex VII of CLP)

GHS Classification

Hazard class

Serious eye damage/eye irritation
Target Organ Systemic Toxicant - Single exposure
Skin sensitization
Chronic hazards to the aquatic environment

Hazard category

Category 1
Category 3
Category 1
Category 4

Label elements

Danger



Hazard statements

H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H413 May cause long lasting harmful effects to aquatic life.

Precautionary statements

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P273 Avoid release to the environment.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P310	Immediately call a POISON CENTER or doctor/ physician.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P333 + P313	If skin irritation or rash occurs, seek medical advice/attention.
P363	Wash contaminated clothing before reuse.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local regulation.

Other hazards

HMIS® Hazard Ratings: Health - 3, Flammability -1, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

SECTION 3: COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

<u>Weight %</u>	<u>Component</u>	<u>EC-No.</u>	<u>CAS Registry No.</u>	<u>Symbol(s)</u>	<u>Risk code</u>
>=98%	5-Sulfoisophthalic Acid, Silver Salt		not available		
<=2%	water	231-791-2	7732-18-5		

SECTION 4: FIRST-AID MEASURES

Description of first aid measures

Inhalation: Move to fresh air. Treat symptomatically. Get medical attention if symptoms persist.

Eyes: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention immediately.

Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Seek medical advice.

Most important symptoms and effects, both acute and delayed

Severe irritation Allergic reactions

Indication of any immediate medical attention and special treatment needed

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The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media water spray, dry chemical, carbon dioxide

Unsuitable extinguishing media No Restrictions.

Special hazards arising from the substance or mixture

Hazardous Combustion Products: carbon dioxide, carbon monoxide, oxides of sulfur

Unusual Fire and Explosion Hazards: Powdered material may form explosive dust-air mixtures.

Advice for firefighters

Special protective actions for fire-fighters Fight fire from a protected location.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective clothing.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

WEAR PERSONAL PROTECTIVE EQUIPMENT.

Environmental precautions

Do not contaminate surface water.

Methods and materials for containment and cleaning up

Sweep up and place in a clearly labeled container for chemical waste.

Reference to other sections

Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

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Personal Precautionary Measures: Avoid breathing dust. Do not get in eyes and avoid contact with skin and clothing. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials. Minimize dust generation and accumulation.

Conditions for safe storage, including any incompatibilities

Storage: Keep container closed.

Specific end uses

research and development sample

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

no data available

Exposure controls

Country specific exposure limits have not been established or are not applicable unless listed below.

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Respiratory Protection: If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

Skin Protection: Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

Recommended Decontamination Facilities: eye bath, washing facilities

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical Form:	solid (powder)
Color:	white

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Odor:	odorless
Odor Threshold	not available
pH:	not available
Freezing Point:	not available
Boiling Point:	not available
Flash Point	not available
Evaporation Rate:	not available
Flammability (solid, gas)	
Upper Flammable Limit	not available
Lower Flammable Limit	not available
Vapor Pressure	not available
Vapor Density	not available
Specific Gravity:	not available
Solubility	
Solubility in Water:	not available
SolubilityOther	not available
Partition coefficient (n-octanol/water)	not available
Autoignition Temperature	not available
Decomposition temperature	(DSC) No exotherm to 400°C
Viscosity:	not available
Explosive properties	Not classified.
Oxidizing properties	Not classified.

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known., Hazardous decomposition products formed under fire conditions.

Chemical stability

Stable.

Possibility of hazardous reactions

Will not occur.

Conditions to avoid

no data available

Incompatible materials

Material reacts with strong oxidizing agents.

Hazardous decomposition products

carbon monoxide, carbon dioxide, oxides of sulfur

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SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity

General: The health hazard evaluation is based on the toxicological properties of a similar material. Excessive absorption of silver compounds from chronic overexposure may result in argyria, a bluish-gray discoloration of the skin, eyes, and mucous membranes.

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Data for a very similar material

Oral LD-50:(rat)	2,600 mg/kg
Skin Irritation (rabbit)	slight
Eye Irritation (rabbit)	severe
Skin Sensitization: (mouse)	moderate

Skin corrosion/irritation

(rabbit,): slight

Serious eye damage/eye irritation

(rabbit,): severe

Respiratory or skin sensitization

(mouse): moderate

Germ cell mutagenicity

Contains no ingredient listed as a mutagen

Carcinogenicity

Carcinogenicity classification not possible from current data.

Reproductive toxicity

Contains no ingredient listed as toxic to reproduction

STOT - single exposure

Upper respiratory tract- Local irritation

STOT - repeated exposure

Aspiration hazard

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no data available

SECTION 12: ECOLOGICAL INFORMATION

Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.

Toxicity

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

The product itself has not been tested.

Results of PBT and vPvB assessment

no data available

Other adverse effects

May cause long lasting harmful effects to aquatic life.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14: TRANSPORT INFORMATION

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ADR/RID:

Class not regulated

Sea - IMDG (International Maritime Dangerous Goods)

Class not regulated

Air - ICAO (International Civil Aviation Organization)

Class not regulated

Environmental hazards

not regulated

Special precautions for user

No special precautions required.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

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TSCA (US Toxic Substances Control Act): One or more components of this product are not listed on the TSCA inventory. In the USA, its use is restricted to research and development purposes only. This product must be handled by or under the direct supervision of technically qualified persons.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): One or more components of this product are not listed on the DSL. In Canada, its use is restricted to research and development purposes only.

EINECS (European Inventory of Existing Commercial Chemical Substances): One or more components or reactants of this product are not listed on EINECS. In the European Union, its use is restricted to research and development purposes only.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): One or more components of this product are not listed on AICS. In Australia, its use is restricted to research and development purposes only.

MITI (Japanese Handbook of Existing and New Chemical Substances): One or more components of this product are not listed in the Handbook. In Japan, its use is restricted to research and development purposes only.

ECL (Korean Toxic Substances Control Act): One or more components of this product are not listed on the Korean inventory. In Korea, its use is restricted to research and development purposes only.

Philippines Inventory (PICCS): One or more components of this product are not listed on the Philippine inventory. In the Philippines, commercial industrial use is restricted to lawful food, drug, or cosmetic applications. Other uses are restricted to research and development purposes only.

Inventory of Existing Chemical Substances in China: One or more components of this product are not listed on the Inventory of Existing Chemical Substances in China (IECSC).

Chemical Safety Assessment

no data available

SECTION 16: OTHER INFORMATION

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.