



Material Safety Data Sheet

Section I. Chemical Product and Company Identification	
Common Name/ Trade Name	Allegro 500F
Synonym	IKF-1216, Fluazinam 500F
Chemical Name	Fluazinam
Chemical Family	Phenylpyridinylamine
Material Uses	Agricultural industry: Fungicide
Product Code	Not Available
Canadian Registration No. (Pest Control Products Act)	27517
MSDS No.	33
General Information:	ISK Biosciences Corporation 7470 Auburn Rd., Suite A Concord, OH 44077-9073 (440) 357-4640
24Hr Emergency Number:	(888) 484-7546
Manufacturer:	ISHIHARA SANGYO KAISHA, LTD. 3-15, Edobori 1-chome Nishi-ku, Osaka 550-0002 Japan

Section II. Composition and Information on Hazardous Ingredients			
Chemical Name	CAS #	% by Weight	TLV/PEL
Fluazinam	79622-59-6	40	Not established.

Section III. Hazards Identification	
Potential Acute Health Effects	Eye Contact: <u>Minimally irritating</u> Ingestion: <u>Harmful if swallowed.</u> Inhalation: <u>Repeated or prolonged exposure may cause lung irritation.</u> Skin Contact: <u>Moderate skin irritant. May cause dermal sensitization.</u> Skin Absorption: <u>Not readily absorbed through intact skin.</u>
Potential Chronic Health Effects	Human experience in the production of technical material has revealed no adverse effects. Appropriate precautions should be taken to minimize human exposure. Always wear proper protective equipment.

Section IV. First Aid Measures	
Eye Contact:	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids apart to ensure flushing of the entire eye surface. Seek medical attention.
Skin Contact:	Wash exposed area with plenty of soap and water. Remove contaminated clothing and footwear. Seek medical attention.
Inhalation:	Remove person from contaminated area to fresh air. If symptoms develop, seek medical attention.
Ingestion:	Have victim(s) sip glass of water if able to swallow. DO NOT induce vomiting unless told to do so by a poison control center or doctor. DO NOT give anything by mouth to an unconscious person.

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Section V. Fire and Explosion Data

Flash Point	Not applicable.
Auto-Ignition Temperature	Not applicable.
Flammable Limits	Noncombustible.
Unusual Fire and Explosion Hazards	May decompose under fire conditions emitting gases and vapors which may be toxic and irritating to the respiratory tract.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemicals, CO2, water spray or foam. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet.

Section VI. Accidental Release Measures

Spill or Release	Contain spill. Remove as much as possible and remove any contaminated soil. Place in closed, labeled container and store in a safe place to await proper disposal. Do not contaminate water while cleaning equipment or disposing of wastes. Persons performing this work should wear adequate personal protective equipment and clothing.
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Section VII. Handling and Storage

Precautions	Avoid contact with skin and eyes.
Storage	Keep only in the original container. Keep out of reach of children. Store in a dry, well ventilated place away from excessive heat. Keep away from food, drink and animal feedstuffs.

Section VIII. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection	Wear safety glasses or chemical goggles and chemical resistant gloves to minimize skin contact.
Other Clothing and Equipment	Wear a long sleeved shirt, long pants and boots when using or handling this material.
Exposure Limits	Not established.
Worker Protection Standard	Not available

Section IX. Physical and Chemical Properties

Physical appearance and Odor	Yellow liquid. Pungent odor.
pH	5.9 [Acidic]
Boiling Point	Not applicable.
Melting Point	115.5°C (based on technical grade active ingredient)
Freezing Point	-5°C
Specific Gravity	1.74 (based on technical grade active ingredient)
Vapor Pressure	8.25×10^{-6} mm Hg @ 25°C (based on technical grade active ingredient)
Vapor Density	Not determined.
Volatility	Not Volatile
Evaporation rate	Not available.
Bulk Density	1.259 g/ml
Solubility	Active ingredient: 0.02 - 0.07 ppm in water at 25°C

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Section X. Stability and Reactivity Data

Stability	The product is stable.
Conditions of Instability	No additional remark.
Incompatibility with Various substances	Avoid contact with heat or open flame.
Conditions Contributing to Hazardous Polymerization	None.
Hazardous Decomposition Products	May decompose under fire conditions to release vapors or gases which are toxic and irritating to the respiratory tract.

Section XI. Toxicological Information

Routes of Entry	NONE
Toxicity to Animals	<p>Acute oral toxicity (LD50): >5000mg/kg (rat).</p> <p>Acute dermal toxicity (LD50): >2000mg/kg (rabbit).</p> <p>Acute inhalation toxicity (LC50): >1.3 mg/L [actual airborne concentration]; .23 mg/L (nominal concentration) 4 hour [rat].</p> <p>Primary eye irritation: Maximum mean total score (Draize method) 7.7 at 24 hour interval. Did not produce corneal or iridal effects.</p> <p>Primary dermal irritation: index: 4.5; Moderate skin irritant.</p> <p>Primary dermal sensitization: Demonstrated potential to produce dermal sensitization.</p>


Section XII. Ecological Information

Environmental Hazards:	Observe buffer zones specified under Directions for Use of the product label. This product is toxic to fish. This product is toxic to wild mammals. Fluazinam is persistent and will carry over; it is recommended that the product, Allegro 500F containing fluazinam, not be used in areas treated with with product during the previous season.
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Section XIII. Disposal Considerations

Waste Disposal	For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.
Container Disposal	<ol style="list-style-type: none"> 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank. 2. Follow provincial instruction for any required additional cleaning of the container prior to its disposal. 3. Make the empty container unsuitable for further use. 4. Dispose of the container in accordance with provincial requirements.

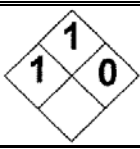






Section XIV. Transport Information

DOT Classification	Not a DOT controlled material (United States).
Proper Shipping Name	
DOT Identification Number	
Packing Group	
Hazardous Substance Reportable Quantity	Not a hazardous substance.
Special Provisions for Transport	No additional remark.
DOT (Pictogram)	

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IATA (Air Transport)	IMDG (Ocean Transport)
Proper Shipping Name	Proper Shipping Name
Hazard Class Not controlled under IATA	Hazard Class Not controlled under IMDG
Identification Number	Identification Number
Packing Group	Packing Group
IATA (Pictogram)	IMDG (Pictogram)
For Further Information Contact ISK Biosciences Corporation at: (440) 357-4640	

Section XV. Other Regulatory Information and Pictograms

Federal and State Regulations	SARA 313 Hazardous Inventory: None SARA 312 Hazards Classification: Acute Health Listed as carcinogen by IARC, NTP, OSHA, CA Prop 65: No									
Other Classifications	WHMIS (Canada) WHMIS CLASS D-1A; Material causing immediate and serious toxic effects (VERY TOXIC) DSCL (EEC) R26-Very toxic by inhalation									
HMIS (U.S.A.)	<table border="1"> <tr> <td>Health Hazard</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> <tr> <td>Personal Protection</td> <td>a</td> </tr> </table>	Health Hazard	1	Fire Hazard	1	Reactivity	0	Personal Protection	a	National Fire Protection Association (U.S.A.) Health 
Health Hazard	1									
Fire Hazard	1									
Reactivity	0									
Personal Protection	a									
WHMIS (Canada) (Pictograms)										
DSCL (Europe) (Pictograms)										
TDG (Canada) (Pictograms)										
ADR (Europe) (Pictograms)										
Protective Clothing (Pictograms)	 									

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Section XVI. Other Information

Validated by Mark Gelin on 12/31/08

Verified by Mark Gelin

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Notice to Reader

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