

Material Safety Data Sheet FFAST[™] BTI

MSDS Number: 102000022735 MSDS Version 1.1 Revision Date: 10/11/2011 Print Date: 10/11/2011

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product name	FFAST [™] BTI
MSDS Number	102000022735
Product code (UVP)	79994931
EPA Registration No.	432-1515
Product Use	Larvicide

Bayer Environmental Science 2 T.W. Alexander Drive Research Triangle PK, NC 27709 USA

For MEDICAL, TRANSPORTATION or other EMERGENCY call: 1-800-334-7577 (24 hours/day) For Product Information call: 1-800-331-2867

SECTION 2. HAZARDS IDENTIFICATION

NOTE: Please refer to Section 11 for detailed toxicological information.

Emergency Overview	Caution! Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing. Wash thoroughly with soap and water after handling. Remove and wash contaminated clothing before re-use.
Physical State	liquid suspension
Appearance	light tan to brown
Exposure routes	Skin Absorption, Eye contact
Immediate Effects Eye	May cause eye irritation. Avoid contact with eyes.
Skin	Harmful if absorbed through skin. Avoid contact with skin, eyes and clothing.
Inhalation	May cause irritation. Avoid breathing spray mist.
Potential Environmental Effect	This product may impact surface water quality due to runoff.



Material Safety Data Sheet FFAST[™] BTI

MSDS Number: 102000022735 MSDS Version 1.1

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS			
Hazardous Component M Bacillus thuringiensis Cetyl alcohol	<u>lame</u>	<u>CAS-No.</u> 68038-71-1 36653-82-4	<u>Average % by Weight</u> 10.00 1.75
SECTION 4. FIRST AID M	EASURES		
General	When possible, have the poison control center or		abel with you when calling a tment.
Еуе		if present, after the firs	water for 15-20 minutes. It 5 minutes, then continue rinsing nmediately.
Skin			ediately. Wash off immediately I a physician or poison control
Ingestion	water in small sips to dri	nk. DO NOT induce vo ntrol center. Never give	liately. Rinse out mouth and give miting unless directed to do so by anything by mouth to an ended.
Inhalation		erably mouth-to-mouth	l 911 or an ambulance, then give if possible. Call a physician or
Notes to physician Treatment	Appropriate supportive a condition is recommende		nent as indicated by the patient's antidote.

SECTION 5. FIRE FIGHTING MEASURES

Flash point	> 100 °C / 212 °F Not relevant; aqueous solution
Autoignition temperature	no data available
Lower Flammability Limit	no data available
Upper Flammability Limit	no data available
Explosiveness	no data available



Material Safety Data Sheet

FFAST[™] BTI

MSDS Number: 102000022735 MSDS Version 1.1

Fire and Explosion Hazards	In the event of fire the following may be released: Carbon monoxide (CO) Carbon dioxide (CO2) nitrogen oxides (NOx)
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing media	High volume water jet
Fire Fighting Instructions	Evacuate personnel to safe areas. Avoid contact with spilled product or contaminated surfaces. Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses.
	Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.
Methods for cleaning up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Collect and transfer the product into a properly labelled and tightly closed container. Clean contaminated floors and objects thoroughly, observing environmental regulations. Decontaminate tools and equipment following cleanup.
Additional advice	Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal. Do not allow product to contact vegetation.

SECTION 7. HANDLING AND STORAGE

Handling procedures	Avoid contact with skin, eyes and clothing. Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation.
Storing Procedures	Store in a cool, dry place and in such a manner as to prevent cross contamination with other crop protection products, fertilizers, food, and feed. Store in original container and out of the reach of children, preferably in a locked storage area. Store at room temperature.
Work/Hygienic Procedures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics.



Material Safety Data Sheet FFAST[™] BTI

MSDS Number: 102000022735 MSDS Version 1.1

Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General Protection	Follow all label instructions. Train employees in safe use of the product.
	Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and warm/tepid water. Keep and wash PPE separately from other laundry.
Eye/Face Protection	Safety glasses with side-shields
Hand protection	Chemical-resistant gloves (barrier laminate, butyl rubber, nitrile rubber or Viton)
Body Protection	Wear long-sleeved shirt and long pants and shoes plus socks.
Respiratory protection	When respirators are required, select NIOSH approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industry recommendations.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	light tan to brown
Physical State	liquid suspension
рН	4 - 6 (100 %)
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.02 g/cm ³
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Minimum Ignition Energy	no data available



MSDS Version 1.1

MSDS Number: 102000022735

Material Safety Data Sheet FFAST[™] BTI

Partition coefficient: n- no data available octanol/water

Viscosity 1,200 - 2,200 cps

SECTION 10. STABILITY AND REACTIVITY

Conditions to avoid	freezing
Incompatibility	no data available
Hazardous Decomposition Products	Thermal decomposition can lead to release of: Carbon dioxide (CO2) Carbon monoxide nitrogen oxides (NOx)
Hazardous reactions	No hazardous reactions known.
Chemical Stability	Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	female rat: LD50: > 5,000 mg/kg
Acute dermal toxicity	male/female combined rat: LD50: > 2,000 mg/kg
Acute inhalation toxicity	male/female combined rat: LC50: > 2.1 mg/l Exposure time: 4 h Determined in the form of a respirable aerosol. Highest attainable concentration.
Skin irritation	rabbit: Moderate skin irritation.
Eye irritation	rabbit: Minimally irritating.
ACGIH None. NTP None. IARC None. OSHA None.	

SECTION 12. ECOLOGICAL INFORMATION



Material Safety Data Sheet

FFAST[™] BTI

MSDS Number: 102000022735 MSDS Version 1.1

Environmental Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. Apply this product as specified on the label.

SECTION 13. DISPOSAL CONSIDERATIONS

General Disposal Guidance	Do not contaminate water, food, or feed by disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law.
Container Disposal	Do not re-use empty containers. Triple rinse containers. Completely empty container into application equipment, then dispose of empty container in a sanitary landfill, by incineration or by other procedures approved by state/provincial and local authorities. If burned, stay out of smoke. Follow advice on product label and/or leaflet.
RCRA Information	Characterization and proper disposal of this material as a special or hazardous waste is dependent upon Federal, State and local laws and are the user's responsibility. RCRA classification may apply.

SECTION 14. TRANSPORT INFORMATION

According to national and international transport regulations this material is not classified as dangerous goods / hazardous material.

SECTION 15. REGULATORY INFORMATION

EPA Registration No. 432-1515

US Federal Regulations TSCA list Bacillus thuringiensis 68038-71-1 Cetyl alcohol 36653-82-4 US. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpt D) None. SARA Title III - Section 302 - Notification and Information None. SARA Title III - Section 313 - Toxic Chemical Release Reporting None. US States Regulatory Reporting CA Prop65 This product does not contain any substances known to the State of California to cause cancer.

This product does not contain any substances known to the State of California to cause reproductive harm.



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US State Right-To-Know Ingredients None.

Canadian Regulations Canadian Domestic Substance List Bacillus thuringiensis Cetyl alcohol

Environmental

CERCLA None. Clean Water Section 307 Priority Pollutants None. Safe Drinking Water Act Maximum Contaminant Levels None.

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association):
Health - 2Health - 2Flammability - 1Instability - 0Others - noneHMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)
Health - 1Flammability - 1Physical Hazard - 0PPE -0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

68038-71-1

36653-82-4

Reason for Revision: Reviewed and updated for general editorial purposes. The following sections have been revised: Section 7: Handling and Storage.

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