



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

1/11
Revision Date: 03/20/2014
Print Date: 12/15/2016

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name TEMPRID® FX INSECTICIDE

Product code (UVP) 79521359

SDS Number 102000019505

EPA Registration No. 432-1544

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

Use Insecticide

Restrictions on use See product label for restrictions.

Information on manufacturer

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

Emergency Telephone Number (24hr/ 7 days) 1-800-334-7577

**Product Information
Telephone Number**

SDS Information or Request SDSINFO.BCS-NA@bayer.com

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with regulation HCS 29CFR §1910.1200

Eye irritation : Category 2B
Acute toxicity (Oral): Category 4



Signal word: Warning

Hazard statements

Harmful if swallowed.
Causes eye irritation.

Precautionary statements

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

2/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

If eye irritation persists: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.
Dispose of contents/container in accordance with local regulation.

Other hazards

No other hazards known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Imidacloprid	138261-41-3	21.00
Beta-Cyfluthrin	68359-37-5	10.50
Glycerine	56-81-5	10.00
Naphthalene and alkyl naphthalene sulphonic acids formaldehyde condensate, sodium salt	68425-94-5	2.60

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General advice	When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a physician or poison control center immediately.
Skin contact	Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.
Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a physician or poison control center immediately.
Ingestion	Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center. Never give anything by mouth to an unconscious person. Do not leave victim unattended.

Most important symptoms and effects, both acute and delayed

Symptoms	To date no symptoms are known.
-----------------	--------------------------------

Indication of any immediate medical attention and special treatment needed

Treatment	Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended. There is no specific antidote.
------------------	---



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

3/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Water spray, Foam, Carbon dioxide (CO2), Dry chemical

Unsuitable None known.

Special hazards arising from the substance or mixture Dangerous gases are evolved in the event of a fire.

Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear NIOSH approved self-contained breathing apparatus and full protective clothing.

Further information Avoid contact with spilled product or contaminated surfaces. Evacuate personnel to safe areas. 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.

Flash point > 93.3 °C

Autoignition temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Explosivity not applicable

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Precautions Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces.

Methods and materials for containment and cleaning up

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.

Additional advice Use personal protective equipment. Do not allow to enter soil, waterways or waste water canal.

Reference to other sections Information regarding safe handling, see section 7.
Information regarding personal protective equipment, see section 8.
Information regarding waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

Bayer Environmental Science

SAFETY DATA SHEET



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

4/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Precautions for safe handling

Advice on safe handling 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.

Hygiene measures Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. 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.

Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers 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.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Components	CAS-No.	Control parameters	Update	Basis
Imidacloprid	138261-41-3	0.7 mg/m3 (TWA)		OES BCS*
Imidacloprid	138261-41-3	5ug/m3 (AN ESL)	07 2011	TX ESL
Imidacloprid	138261-41-3	50ug/m3 (ST ESL)	07 2011	TX ESL
Beta-Cyfluthrin	68359-37-5	50ug/m3 (ST ESL)	10 2003	TX ESL
Beta-Cyfluthrin (Particulate.)	68359-37-5	50ug/m3 (ST ESL)	10 2003	TX ESL
Beta-Cyfluthrin (Particulate.)	68359-37-5	5ug/m3 (AN ESL)	10 2003	TX ESL
Beta-Cyfluthrin	68359-37-5	5ug/m3 (AN ESL)	10 2003	TX ESL
Beta-Cyfluthrin	68359-37-5	0.01 mg/m3 (TWA)		OES BCS*
Glycerine (Total dust.)	56-81-5	15 mg/m3 (PEL)	02 2006	OSHA Z1
Glycerine (Respirable fraction.)	56-81-5	5 mg/m3 (PEL)	02 2006	OSHA Z1
Glycerine (Respirable fraction.)	56-81-5	5 mg/m3 (TWA)	1989	OSHA Z1A
Glycerine (Total dust.)	56-81-5	10 mg/m3 (TWA)	1989	OSHA Z1A
Glycerine	56-81-5	10 mg/m3	06 2008	TN OEL



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

5/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

(Total dust and mist.)		(TWA)		
Glycerine (Respirable fraction and dust or fume.)	56-81-5	5 mg/m ³ (TWA)	06 2008	TN OEL
Glycerine (Particulate.)	56-81-5	50ug/m ³ (ST ESL)	02 2013	TX ESL
Glycerine (Particulate.)	56-81-5	5ug/m ³ (AN ESL)	02 2013	TX ESL
Glycerine (Vapor.)	56-81-5	100ug/m ³ (AN ESL)	02 2013	TX ESL
Glycerine (Vapor.)	56-81-5	1000ug/m ³ (ST ESL)	02 2013	TX ESL

*OES BCS: Internal Bayer CropScience "Occupational Exposure Standard"

Exposure controls

Personal protective equipment

In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply.

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.
Hand protection	Chemical resistant nitrile rubber gloves
Eye protection	Tightly fitting safety goggles
Skin and body protection	Wear long-sleeved shirt and long pants and shoes plus socks.
General protective measures	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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	white to beige
Physical State	suspension
Odor	characteristic
Odour Threshold	no data available
pH	ca. 6.9 at 10 %
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.16 g/cm ³ at 20 °C



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

6/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	no data available
Water solubility	dispersible
Minimum Ignition Energy	not applicable
Decomposition temperature	not applicable
Partition coefficient: n-octanol/water	no data available
Viscosity	500 - 1,100 mPa.s
Flash point	> 93.3 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	not applicable
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Extremes of temperature and direct sunlight.
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Skin Absorption, Eye contact, Ingestion
Immediate Effects	
Eye	Moderate eye irritation.
Skin	Harmful if absorbed through skin. May cause slight irritation.
Ingestion	Harmful if swallowed.

Information on toxicological effects



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

7/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Acute oral toxicity LD50 (female rat) > 1,044 mg/kg

Acute inhalation toxicity LC50 (rat) > 2.03 mg/l
Exposure time: 4 h
Determined in the form of liquid aerosol.
highest concentration tested
No deaths

LC50 (rat) > 8.12 mg/l
Exposure time: 1 h
Determined in the form of liquid aerosol.
Extrapolated from the 4 hr LC50.

Acute dermal toxicity LD50 (rat) > 2,000 mg/kg

Skin irritation Slight irritation (rabbit)

Eye irritation Mild eye irritation. (rabbit)

Sensitisation Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Imidacloprid did not cause specific target organ toxicity in experimental animal studies.
The toxic effects of beta-Cyfluthrin are related to transient hyperactivity typical for pyrethroid neurotoxicity.

Assessment Mutagenicity

Imidacloprid was not mutagenic or genotoxic based on the overall weight of evidence in a battery of in vitro and in vivo tests.

beta-Cyfluthrin was not mutagenic or genotoxic in a battery of in vitro and in vivo tests.

Assessment Carcinogenicity

Imidacloprid was not carcinogenic in lifetime feeding studies in rats and mice.
beta-Cyfluthrin was not carcinogenic in lifetime feeding studies in rats and mice.

ACGIH

None.

NTP

None.

IARC

None.

OSHA

None.

Assessment toxicity to reproduction

Imidacloprid caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with Imidacloprid is related to parental toxicity.
beta-Cyfluthrin caused reproduction toxicity in a two-generation study in rats only at dose levels also toxic to the parent animals. The reproduction toxicity seen with beta-Cyfluthrin is related to parental toxicity.

Assessment developmental toxicity



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

8/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid are related to maternal toxicity.

beta-Cyfluthrin caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with beta-Cyfluthrin are related to maternal toxicity.

Further information

Only acute toxicity studies have been performed on the formulated product.
The non-acute information pertains to the active ingredient(s).

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish

LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 211 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient imidacloprid.

LC50 (Rainbow trout (*Oncorhynchus mykiss*)) 0.000068 mg/l
Exposure time: 96 h
The value mentioned relates to the active ingredient beta-cyfluthrin.

Toxicity to aquatic invertebrates

EC50 (Water flea (*Daphnia magna*)) 85 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient imidacloprid.

LC50 (Chironomus riparius (non-biting midge)) 0.0552 mg/l
Exposure time: 24 h
The value mentioned relates to the active ingredient imidacloprid.

EC50 (Water flea (*Daphnia magna*)) 0.00029 mg/l
Exposure time: 48 h
The value mentioned relates to the active ingredient beta-cyfluthrin.

Toxicity to aquatic plants

EC50 (*Desmodesmus subspicatus*) > 10 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient imidacloprid.
IC50 (*Desmodesmus subspicatus*) > 0.01 mg/l
Growth rate; Exposure time: 72 h
The value mentioned relates to the active ingredient beta-cyfluthrin.
No acute toxicity was observed at its limit of water solubility.

Biodegradability

Imidacloprid: ; not rapidly biodegradable
beta-Cyfluthrin: ; not rapidly biodegradable

Koc

Imidacloprid: Koc: 225
beta-Cyfluthrin: Koc: 508 - 3179

Bioaccumulation

Imidacloprid: ; Does not bioaccumulate.
beta-Cyfluthrin: Bioconcentration factor (BCF) 506; Does not bioaccumulate.

Mobility in soil

Imidacloprid: Moderately mobile in soils
beta-Cyfluthrin: Immobile in soil



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

9/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Environmental precautions	<p>Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark.</p> <p>Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water.</p> <p>Drift and runoff from treated areas may be hazardous to aquatic organisms in adjacent sites.</p> <p>Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.</p> <p>Apply this product as specified on the label.</p>
----------------------------------	---

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Pesticide, spray mixture or rinse water that cannot be used according to label instructions may be disposed of on site or at an approved waste disposal facility.
	Never place unused product down any indoor or outdoor drain.

Follow advice on product label and/or leaflet.

Contaminated packaging	Do not re-use empty containers.
	Triple rinse containers.
	Add washings to sprayer at time of filling.
	Puncture container to avoid re-use.
	Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning.
	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

49CFR	Not dangerous goods / not hazardous material
--------------	--

IMDG

UN number	3082
Class	9
Packaging group	III
Marine pollutant	YES
Proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION)

IATA

UN number	3082
Class	9

Bayer Environmental Science

SAFETY DATA SHEET



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

10/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

Packaging group III
Environm. Hazardous Mark YES
Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(BETA-CYFLUTHRIN, IMIDACLOPRID SOLUTION)

This transportation information is not intended to convey all specific regulatory information relating to this product. It does not address regulatory variations due to package size or special transportation requirements.

SECTION 15: REGULATORY INFORMATION

EPA Registration No. 432-1544

US Federal Regulations

TSCA list

Glycerine	56-81-5
Naphthalene and alkyl naphthalene	68425-94-5
sulphonic acids formaldehyde	
condensate, sodium salt	

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

Beta-Cyfluthrin	68359-37-5	1.0%
-----------------	------------	------

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.

US State Right-To-Know Ingredients

Beta-Cyfluthrin	68359-37-5	NJ
Glycerine	56-81-5	MN

Canadian Regulations

Canadian Domestic Substance List

Glycerine	56-81-5
Naphthalene and alkyl naphthalene	68425-94-5
sulphonic acids formaldehyde	
condensate, sodium salt	

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

Bayer Environmental Science

SAFETY DATA SHEET



TEMPRID® FX INSECTICIDE

Version 2.0 / USA
102000019505

11/11

Revision Date: 03/20/2014
Print Date: 12/15/2016

International Regulations

European Inventory of Existing Commercial Substances (EINECS)
Glycerine 56-81-5

EPA/FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label:

Signal word: Caution!

Hazard statements: Harmful if absorbed through skin.
Harmful if swallowed.
Moderate eye irritation.
Avoid contact with skin, eyes and clothing.
Wash thoroughly with soap and water after handling.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

Health - 1 Flammability - 1 Instability - 0 Others - none

HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)

Health - 1 Flammability - 1 Physical Hazard - 0 PPE -

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

Reason for Revision: Revised according to the current OSHA Hazard Communication Standard (29CFR1910.1200)

Revision Date: 03/20/2014

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions. The product names are registered trademarks of Bayer.