



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

1/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

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

Product identifier

Trade name PROKOZ ZENITH 2F INSECTICIDE

Product code (UVP) 06004481

SDS Number 102000015064

EPA Registration No. 432-1312

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 (24 hours/day)

Product Information Telephone Number 1-800-331-2867

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

Signal word: Warning

Hazard statements

Causes eye irritation.

Precautionary statements

Wash thoroughly after handling.

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

If eye irritation persists: Get medical advice/attention.

Other hazards

No other hazards known.



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

2/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component Name	CAS-No.	Average % by Weight
Imidacloprid	138261-41-3	21.40
Glycerine	56-81-5	10.00

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.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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

Unsuitable None known.

Advice for firefighters

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



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

3/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

Further information	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 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable
Dust explosion class	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

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



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

4/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

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
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 (Total dust and mist.)	56-81-5	10 mg/m3 (TWA)	06 2008	TN OEL
Glycerine (Respirable fraction and dust or fume.)	56-81-5	5 mg/m3 (TWA)	06 2008	TN OEL
Glycerine (Particulate.)	56-81-5	50ug/m3 (ST ESL)	02 2013	TX ESL
Glycerine (Particulate.)	56-81-5	5ug/m3 (AN ESL)	02 2013	TX ESL
Glycerine (Vapor.)	56-81-5	100ug/m3 (AN ESL)	02 2013	TX ESL
Glycerine (Vapor.)	56-81-5	1000ug/m3 (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.



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

5/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

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 light beige
Physical State	liquid suspension
Odor	mild
Odour Threshold	no data available
pH	7.5
Vapor Pressure	no data available
Vapor Density (Air = 1)	no data available
Density	1.12 g/cm ³ at 20 °C
Evaporation rate	no data available
Boiling Point	no data available
Melting / Freezing Point	-6.7 °C / 19.9 °F
Water solubility	dispersible
Minimum Ignition Energy	not applicable
Decomposition temperature	no data available
Partition coefficient: n-octanol/water	no data available
Viscosity	350 - 600 mPa.s
Flash point	> 93 °C
Autoignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Explosivity	not applicable
Dust explosion class	Not applicable.



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

6/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Thermal decomposition	no data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	freezing
Incompatible materials	no data available
Hazardous decomposition products	No decomposition products expected under normal conditions of use.

SECTION 11: TOXICOLOGICAL INFORMATION

Exposure routes	Ingestion, Skin Absorption, Eye contact, Inhalation
Immediate Effects	
Eye	May cause mild irritation to eyes.
Skin	May cause slight irritation. Harmful if absorbed through skin.
Ingestion	Harmful if swallowed.

Information on toxicological effects

Acute oral toxicity	LD50 (male rat) > 4,870 mg/kg LD50 (female rat) 4,143 mg/kg
Acute inhalation toxicity	LC50 (male/female combined rat) > 5.33 mg/l Exposure time: 4 h Determined in the form of liquid aerosol. (actual) LC50 (male/female combined rat) > 20 mg/l Exposure time: 1 h Determined in the form of liquid aerosol. Extrapolated from the 4 hr LC50. (actual)
Acute dermal toxicity	LD50 (male/female combined rabbit) > 2,000 mg/kg
Skin irritation	No skin irritation (rabbit)
Eye irritation	Minimally irritating. (rabbit)
Sensitisation	Non-sensitizing. (guinea pig)

Assessment repeated dose toxicity

Imidacloprid did not cause specific target organ toxicity in experimental animal studies.

Assessment Mutagenicity



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

7/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

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

Assessment Carcinogenicity

Imidacloprid 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.

Assessment developmental toxicity

Imidacloprid caused developmental toxicity only at dose levels toxic to the dams. The developmental effects seen with Imidacloprid 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 (<i>Oncorhynchus mykiss</i>)) 211 mg/l Exposure time: 96 h The value mentioned relates to the active ingredient imidacloprid.
Toxicity to aquatic invertebrates	EC50 (Water flea (<i>Daphnia magna</i>)) 85 mg/l Exposure time: 48 h The value mentioned relates to the active ingredient imidacloprid. LC50 (<i>Chironomus riparius</i> (non-biting midge)) 0.0552 mg/l Exposure time: 24 h The value mentioned relates to the active ingredient imidacloprid.
Toxicity to aquatic plants	EC50 (<i>Desmodium subspicatus</i>) > 10 mg/l Growth rate; Exposure time: 72 h The value mentioned relates to the active ingredient imidacloprid.
Biodegradability	Imidacloprid; not rapidly biodegradable



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

8/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

Koc	Imidacloprid: Koc: 225
Bioaccumulation	Imidacloprid: ; Does not bioaccumulate.
Mobility in soil	Imidacloprid: Moderately mobile in soils
Environmental precautions	Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. 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. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Product	Do not contaminate water, food, or feed by disposal. Dispose in accordance with all local, state/provincial and federal regulations.
Contaminated packaging	Do not re-use empty containers. Triple rinse containers. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by State and Local authorities, by burning. If burned, stay out of smoke.
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. (IMIDACLOPRID SOLUTION)
IATA	
UN number	3082
Class	9
Packaging group	III
Environm. Hazardous Mark	YES



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

9/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S.
(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. 432-1312

US Federal Regulations

TSCA list

Glycerine 56-81-5

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.

US State Right-To-Know Ingredients

Glycerine 56-81-5 MN

Canadian Regulations

Canadian Domestic Substance List

Glycerine 56-81-5

Environmental

CERCLA

None.

Clean Water Section 307 Priority Pollutants

None.

Safe Drinking Water Act Maximum Contaminant Levels

None.

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



PROKOZ ZENITH 2F INSECTICIDE

Version 3.0 / USA
102000015064

10/10
Revision Date: 03/07/2014
Print Date: 03/26/2015

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: Hazard to humans and domestic animals.
Keep out of reach of children and animals.
Harmful if swallowed or absorbed through skin.
Avoid contact with skin, eyes and clothing.
Avoid breathing spray mist.

SECTION 16: OTHER INFORMATION

NFPA 704 (National Fire Protection Association):

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

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

Health - 1 Flammability - 1 Physical Hazard - 1 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: 03/07/2014

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.