



TIDE INTERNATIONAL USA, INC.
—A DIVISION OF TIDE GROUP

REVISION DATE: 01/15/2024 VERSION 2.0

[1. Identification]

Product name: Tide Imidacloprid 2F T&O
Chemical name: 1- (6-chloro-3- pyridylmethyl)-N-nitroimidazolidin-2-ylideneamine
Chemical family: Neonicotinoid
EPA Reg. No.: 84229-14
Recommended Use: Insecticide
Supplier: Tide International USA, Inc.
21 Hubble, Irvine, CA 92618
1-949-679-3535
For medical or chemical* emergencies: Call CHEMTREC®: 1-800-424-9300 (24 hours/day)
*Spill, leak, fire, exposure or accident
For non-emergency product information: Call the NATIONAL PESTICIDE INFORMATION CENTER
1-800-858-7378 (Monday - Friday, 8-12 PM Pacific time)

[2. Hazard(s) Identification]

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR §1910.1200 (2012)

Classification of the substance or mixture:

Acute Oral (Category 4)
Acute Dermal (Category 5)
Acute Inhalation (Category 4)
Eye irritation (Category 2B)
Acute aquatic toxicity (Category 2)
Chronic aquatic toxicity (Category 2)

GHS pictograms



Signal Word: WARNING

GHS Hazard Statements:

H302 Harmful if swallowed
H313 May be harmful in contact with skin
H332 Harmful if inhaled.
H410 Very toxic to aquatic life with long lasting effects

Precautionary Statements:

Prevention:

P264 Wash thoroughly after handling.

- P270 Do not eat, drink or smoke when using this product.
 P261 Avoid breathing mist and spray.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment not in accordance with the product label.
 P391 Collect spillage.

Response:

- P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 P330 Rinse mouth.
 P302 + P312 IF ON SKIN: Call a POISON CENTER/doctor/...if you feel unwell.
 P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a POISON CENTER/doctor/if you feel unwell.

Disposal:

- P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulations.

Hazards not otherwise classified:

None known

[3. Composition / Information on Ingredients]

According to Hazard Communication Standard (HCS) or 29 CFR §1910.1200 (2012).

Active ingredient	CAS No.	Content (w/w,%)	ACIGH TWA
Imidacloprid (EZ)-1-(6-cloro-3-piridilmetil)- N-nitroimidazolidin-2-ilidenoamina	138261-41-3	22.6 min.	NE
Sodium bentonite	1302-78-9	1.5% max.	3 mg/m ³ Respirable particles 10 mg/m ³ Inhalable particles
Propylene glycol	57-55-6	5.0 max	10 mg/m ³ (AIHA WEEL)
Other ingredient deemed not to be hazardous	Proprietary	Balance	-

*Ingredients not specifically listed are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

[4. First aid measures]

If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to the doctor.

If swallowed:

Immediately call a poison control center or doctor immediately for treatment advice. Have person sip a 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.

If inhaled:

Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If on skin or clothing:

Take off contaminated clothing and shoes immediately. Wash off immediately with plenty of water for at

least 15 minutes. Call a poison control center or doctor for further treatment advice.

If in eyes:

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.

Note to physician:

No specific antidote is available. Treat the patient symptomatically.

[5. Fire-Fighting measures]

NFPA Ratings: Health-1 Flammability-1 Instability-0

Suitable extinguishing media: Water; Carbon Dioxide; Dry Chemical; Foam.

Unsuitable extinguishing media: No data available

Special hazards arising from the chemical (hazardous combustion products): In the event of fire the following may be released: Hydrogen chloride (HCl), Hydrogen cyanide (hydrocyanic acid), Carbon monoxide (CO), Nitrogen oxides (NOx)

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

Advice for firefighters: 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.

[6. Accidental release measures]

Personal precautions, protective equipment and emergency procedures:

Precautions:

Isolate hazard area. Keep unauthorized people away. Avoid contact with spilled product or contaminated surfaces. Use personal protective equipment.

General and Disposal: Isolate area and keep unauthorized people away. Avoid breathing vapors and avoid skin contact. Use proper protective equipment to minimize personal exposure (see Section 8). Contaminated soil may have to be removed and disposed.

Methods for Cleaning up: Take up with absorbent material (e.g. sand, diatomaceous earth or a proprietary absorbent material). Keep in suitable, closed containers for disposal. Clean contaminated floors and objects thoroughly, observing environmental regulations.

Additional Advice: Use personal protective equipment. Do not allow product to enter streams, sewers or other waterways. Do not allow product to contact vegetation.

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.

[7. Handling and Storage]

Precautions for safe handling:

Use only outdoors or in a well-ventilated area. Avoid breathing fumes/vapors. Handle and open container in a manner as to prevent spillage. If the container is leaking, invert to prevent leakage and carefully dam up the spilled material to prevent runoff. Refer to the Precautionary Statements section of this label for hazards associated with the handling of this material. Do not walk through spilled material. Absorb spilled material with absorbing type compounds and dispose of as directed for pesticides below. In spill or leak incidents, keep unauthorized people away.

Advice on safe handling: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Use with adequate ventilation. Discard contaminated shoes. Keep away from heat, sparks and flame.

Conditions for safe storage: Do not put concentrate or dilute into food or drink containers. Store in cool, dry place. Do not store diluted spray.

[8. Exposure controls / Personal protection]

Control parameters:

Components.	CAS-No	Control parameters	Basis
Imidacloprid	138261-41-3	NE	NE
Sodium bentonite	1302-78-9	3 mg/m ³ Respirable particles 10 mg/m ³ Inhalable particles 15 mg/m ³ Total dust 5 mg/m ³ Respirable fraction 15 mg/m ³ Total dust 5 mg/m ³ Respirable fraction	ACGIH TWA ACGIH TWA OSHA PEL OSHA PEL OSHA TWA OSHA TWA
Propylene glycol	57-55-6	10 mg/m ³	AIHA WEEL

Appropriate engineering controls:

Control process conditions to avoid contact. Work in a well-ventilated area only.

Individual protection measures, such as personal protective equipment (PPE)

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:

Not normally required. When respiratory protection is necessary under the conditions of use, wear a respirator approved for pesticides by the National Institute for Occupational Safety and Health (NIOSH).

Hand protection:

Chemical-resistant gloves made of nitrile rubber > 14 mils., butyl rubber > 14 mils., neoprene rubber >14 mils., barrier laminate, polyvinyl chloride (PVC) > 14 mils , or Viton > 14 mils.

Eye protection:

Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Skin protection:

Wear long-sleeved shirt and long pants and shoes plus socks.

[9. Physical and chemical properties]

Appearance: White opaque thick liquid

Odor: Aromatic-like odor

Odor threshold: No Data Available

pH: 5.0-8.0

Melting point/freezing point: No Data Available

Initial boiling point and boiling range: Not determined

Flammability: >100°C

Explosibility: Does not have explosive characteristics.

Evaporation rate: No Data Available

Vapor pressure: 9×10^{-10} mPa (25°C, Imidacloprid)

Vapor density: No Data Available

Density: ca.1.11g/cm³

Solubility: Dispersible

Octanol/water partition coefficient: log P = 0.57 @ 21°C (Imidacloprid)

Auto-ignition temperature: No Data Available

Decomposition temperature: TGA-measurement: Above 230 °C, a weight loss was observed both under air and under a nitrogen atmosphere.

Viscosity: Non-Newtonian fluid

These physical data are typical values based on material test but may vary from sample to sample. Typical values should not construed as a guaranteed analysis and any specific lot or as specification items.

[10. Stability and reactivity]

Reactivity: Product will not undergo polymerization

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: Will not occur hazardous polymerization.

Conditions to avoid: Excessive heat. For imidacloprid, strong exothermal reaction above 200°C

Incompatible Materials: Not known

Hazardous decomposition products: Hydrogen chloride, Hydrogen cyanide (hydrocyanic acid), Carbon monoxide, Nitrogen oxides (NO_x)

[11. Toxicological information]

Exposure routes: Eyes, skin, ingestion & inhalation.

No specific data is available for this product as no toxicity tests have been conducted on this product. Information presented is our best judgement based on Imidacloprid technical.

Toxicity:

Acute oral toxicity LD₅₀ for female rat 1,030mg/kg

Acute dermal toxicity LD₅₀ for rabbits >5,000mg/kg

Acute inhalation toxicity LC₅₀ (4h) >2.03 mg/L in male rats

Skin irritation Slightly irritating

Eye irritation Mildly irritating

Sensitization No skin sensitizing reaction in guinea pigs

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

Carcinogenic : Not listed by IARC, NTP or OSHA.

Chronic Effects : In chronic dietary studies in rats and dogs exposed to imidacloprid, the target organs were the thyroid and/or liver.

Other Hazards : Imidacloprid: Not a primary reproductive toxicant, not genotoxic or mutagenic. Neurotoxicity studies in rats showed slight behavioral and activity changes only at the highest dose

tested. No correlating morphological changes observed in neural tissues.

[12. Ecological information]

This product is highly toxic to bees exposed to direct treatment or residues in blooming crops, plants or weeds. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

Avian toxicity: Imidacloprid technical

LD50 (Mallard duck): > 283 mg/kg

LD50 (Bobwhite quail): 152mg/kg

Aquatic organism toxicity: Imidacloprid technical

Fish LC₅₀ (96 h) for rainbow trout 211mg/L.

Daphnia EC₅₀ (48 h) 85mg/L.

Other non-target organism toxicity: Imidacloprid technical

Bees: LD50 (oral, 48hr) Bee > 3.7ng/bee; LD50 (contact, 48hr) Bee: 81 ng/bee

Worms: The LC50 for earthworms is 10.7 mg/kg dry soil

Persistence/Degradability: The time required for 50% of the field-applied Imidacloprid to dissipate (DT50) can range from approximately 80 days to 2 years. Classified as persistent in soil.

Bioaccumulative potential: Low potential.

Mobility in soil: Low mobility at low application rate and with aging.

PBT and vPvB assessment Imidacloprid: This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

Endocrine disrupting properties assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other adverse effects: No other effects to be mentioned.

[13. Disposal considerations]

Dispose of contents and container in accordance with local regulations.

Waste Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Follow advice on product label and/or leaflet.

[14. Transport information]

UN Proper Shipping Name : Not regulated by DOT.

Transport Hazard Class : None

UN Identification Number : None

Packaging Group : None

Environmental Hazards : Marine Pollutant per EU criteria but not listed on Appendix B to 49 CFR 172.101.

Transport in Bulk : Not regulated

Special Precautions for Transportation : If shipped by air (IATA) or vessel (IMDG), ship as: UN3082, Environmentally Hazardous Substance, Liquid, n.o.s., (Imidacloprid), 9, PG III, Marine Pollutant

Freight Classification : Pesticides, NOI, Insecticides, Other than Poison (NMFC Item 155050, Sub 11, Class 70)

[15. Regulatory information]

FIFRA

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. The following is the hazard information as required on the pesticide label:

EPA Reg. No.: 84229-14

EPA Signal word: Caution

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if inhaled. Harmful if swallowed. Avoid breathing spray mist. Remove and wash contaminated clothing before use. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or before using the toilet.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters.

This product is highly toxic to bees exposed to direct treatment or residues in blooming crops, plants or weeds. Do not apply this product or allow it to drift to blooming crops, plants or weeds if bees are foraging in the treatment area. This product is toxic to wildlife and highly toxic to aquatic invertebrates.

US Federal Regulations:

TSCA list: The ingredients of this product are listed on the TSCA inventory or are exempt.

SARA Title III - Section 302 - notification and information None

SARA Title III - Section 313 - toxic chemical release reporting None

SARA Title III - Section 311/312 - hazard identification

Immediate (Acute) ; Delayed (Chronic)

This product contains none of the components listed as Extremely Hazardous substances.

OSHA Hazardous Components:

Sodium bentonite: 1302-78-9

U.S. Regulatory Reporting

CA Prop65

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

State information: Each state may promulgate standards more stringent than the federal government. This section cannot encompass an inclusive list of all state regulations. Therefore, the user should consult state or local authorities.

Canadian Regulations

All ingredients are on the inventory or exempt from listing.

Environmental

CERCLA None

[16. Other information]

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Tide International USA, Inc. assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of this data.