SECTION 1: Product and Company Identification

1.1. Product identifier

Trade name : Xytect 10%

Product code : EPA Reg. No. 74779-11

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

1.2.1. Relevant identified uses

Use of the substance/preparation : Insecticide

1.2.2. Uses advised against

No data available

1.3. Details of the supplier of the safety data sheet

Rainbow Ecoscience
11571 K-Tel Drive
Minnetonka, MN 55343
Phone: 1-(877) 272-6747 (toll free)
www.rainbowecoscience.com

1.4. Emergency telephone number

Emergency number : (800)-424-9300 (CHEMTREC)
(800)-222-1222 (National Poison Information Center)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Classification of Xytect 10%

Hazard Class	Category	Hazard Statement
Combustible liquid	4	H227
Causes mild skin irritation	3	H316
Causes eye irritation	2	H320
May damage fertility or the unborn child.	1	H360

Full text of H-phrases: see table in “Label elements” below

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

GHS Labeling Elements

Hazard pictograms (CLP) :

Signal word : WARNING

GHS Labeling Elements

Hazard statements : H227 – Heating may cause a fire
H316 – Causes mild skin irritation
H320 – Causes eye irritation
H360 - May damage fertility or the unborn child.

Precautionary statements (prevention) : P210 – Keep away from flames
P264 – Wash thoroughly after handling
P270 – Do not eat, drink or smoke when using this product
P280 – Wear protective gloves/clothing and eye protection/face protection

Precautionary statements (response) : P302+P352 - IF ON SKIN: Wash with planty of soap and water.
P332+P313 - If skin irritation occurs, get medical advice/attention.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337+P313 – If eye irritation persists: Get medical advice or attention

Precautionary statements (disposal) : P501 – Dispose of contents/container in accordance with federal, state and local regulations.

SECTION 3: Composition/information on ingredients

Name	CAS Number	Weight %	Active Ingredient
Dimethylsulfoxide	67-68-5	> 30	
Tetrahydrofurfuryl Alcohol	97-99-4	> 30	
Imidacloprid	138261-41-3	10	X
Other Ingredients	Proprietary	Trade Secret	

The exact percentage (concentration) of composition has been withheld as a trade secret

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice : Show this safety data sheet to the doctor in attendance

IF ON SKIN OR CLOTHING : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for 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 poison control center or doctor for treatment advice.

IF SWALLOWED : 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 by a poison control center or doctor. Do not give anything to an unconscious person

IF INHALED : Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration. Call a poison control center or doctor for treatment advice.

First-aid measures – general : There is no specific antidote available. Treat patient symptomatically
.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water fog, carbon dioxide, dry chemical, or foam

5.2. Special hazards arising from the substance or mixture

Fire hazard : Toxic and irritating compounds may be released upon exposure to fire or intense heat

Reactivity : The product is stable at normal handling- and storage conditions, but may burn if heated. Flash point: 202.1°F

5.3. Advice for firefighters

Firefighting instructions : Use self-contained breathing apparatus and full protective clothing. Use water spray (fog) to cool nearby containers and structures exposed to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop spill at its source. Dike area and contain. If possible, collect liquid into salvage tank. Remaining residue may be taken up with inert absorbent material and placed into appropriate containers for disposal. Evaporate until all vapors are gone. Dispose of in accordance with all State and Federal regulations.

6.1.1. For non-emergency personnel

Protective equipment : Wear appropriate personal protective equipment (PPE): Eye and face protection, coveralls, gloves, boots.

Emergency procedures : Avoid contact with spilled material

6.1.2. For emergency responders

Protective equipment : Wear appropriate personal protective equipment (PPE): Eye and face protection, coveralls, gloves, boots.

6.2. Environmental precautions

Prevent material from entering sewers, waterways, or low areas. Do not allow material to contaminate water systems.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Ventilate air. Cleanup personnel require protective clothing and respiratory protection. Pick up and transfer to properly labeled containers.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands thoroughly with soap and water after handling. Remove personal protective equipment immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing/PPE immediately if material gets inside. Wash thoroughly and put on clean clothing.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in an upright position, above 45° F, in a cool, dry place. Do not contaminate water, food, feed by storage or disposal.

SECTION 8: Exposure controls/personal protection

8.1. Personal protective equipment

Eye/Face Protection: To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.

Skin Protection: To avoid contact with skin, wear long pants, long-sleeved shirt, socks, shoes and chemical-resistant gloves (Category C such as barrier laminate; butyl rubber ≥14 mils; nitrile rubber ≥14 mils; or neoprene rubber ≥14 mils).

Respiratory Protection: No protective equipment is needed under norma use conditions due to the method of application. If vapors or mists are present, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

General Hygiene Considerations: Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.

8.2. Exposure controls

Exposure limits: Exposure limits have not been established for the active ingredients in this product. Other ingredient exposure limits are listed below, where applicable:

Other Ingredient
AIAH – Workplace Environmental Exposure Levels (WEELs – TWA) – 0.5 ppm

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Color	:	Purple
Odor	:	Fruity fragrance
Odor threshold	:	No data available
pH	:	4.656
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	178 °C / 352 °F
Flash point	:	94.5 °C / 202.1 °F
Flammability Limit (UEL)	:	1.5
Flammability Limit (LEL)	:	9.7
Vapor pressure	:	0.2 mmHg @ 68°F (20°C)
Relative vapor density at 20 °C	:	2.7 (air = 1)

Specific Gravity	: 1.1102 g/ml @ 22°C
Density	: 1.107 g/ml
Solubility in Water	: Limited
Evaporation rate	: Slow (< 0.01)

9.2. Other information

Product may form white crystals when mixed with water

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is stable at normal handling and storage conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Heat, sparks, or open flame

10.5. Incompatible materials

Oxidizing materials

10.6. Hazardous decomposition products

Combustion produces carbon monoxide, carbon dioxide, and sulfur oxides

SECTION 11: Toxicological information

Information on toxicological effects

Acute Toxicity data for Xytect 10% are provided below

Mectinite	
LD50 oral (male and female rat)	>2000 mg/kg
LD50 dermal (male and female rat)	>2000 mg/kg

Skin irritation Slight irritant (rabbit)

Eye irritation Mildly irritating (rabbit)

Sensitization No Information available

Component Information

Chemical name	Oral LD50	Dermal LD50
Tetrahydrofurfuryl Alcohol 97-99-4	= 1600 mg/kg (Rat)	=5 g/kg (Rabbit)
Dimethyl Sulfoxide 67-68-5	= 14,500 mg/kg (Rat)	= 40,000 mg/kg (Rabbit)

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Imidacloprid

Carcinogenicity : Imidacloprid is not listed as a carcinogen by IARC, NTP, OSHA or

ACGIH.

Reproductive & Developmental toxicity	:	No reproductive or teratogenic (birth defect) effects at normal exposure levels.
Mutagenicity	:	Little or no evidence of mutagenic effects during in vivo or in vitro studies.

Tetrahydrofurfuryl Alcohol		
Carcinogenicity	:	Not listed as a carcinogen by IARC, NTP, OSHA or ACGIH.
Reproductive & Developmental toxicity	:	Not classified based on available information.
Mutagenicity	:	Not classified based on available information

Dimethyl Sulfoxide		
Carcinogenicity	:	Not listed as a carcinogen by IARC, NTP, ACGIH or CA Prop 65
Reproductive & Developmental toxicity	:	No information available.
Mutagenicity	:	No information available

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological Summary

Xytect 10% is highly toxic to aquatic organisms and bees. 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.

Ecotoxicity data

Ecotoxicity data are not available for Xytect 10%. Active ingredient data are given below:

Imidacloprid	
Fish (Rainbow Trout 96 hr.)	LC50: 211 mg/L
Fish (Bluegill 96 hr.)	LC50: Unknown
Acute toxicity Bobwhite quail	Oral LC50: 1500 ppm
Acute toxicity to Honey bee	Contact LD50 Highly toxic!
Acute toxicity mallard ducks	Oral LC50: 4700 ppm

Refer to product label for specific directions on pollinator protection.

Tetrahydrofurfuryl Alcohol 97-99-4	
Fish	LC50: >101mg/L (96h, Oryzias latipes) LC50: =3400mg/L (48h, Chaetodonoides)

Dimethyl Sulfoxide 67-68-5	
Fish	LC50: 25,000 to 43,000 mg/L

12.2. Persistence and degradability

FATE : Imidacloprid has a soil half-life of 29-225 days depending on soil type conditions. It is soluble in water and has the potential to leach in permeable soil types.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Pesticide Disposal: Applicators must dispose of any unused product as the label indicates. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesti¬cide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Non-refillable container. Do not reuse or refill this container. Offer for recycling if available. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, if allowed by state and local authorities Stay out of smoke from burning container.

SECTION 14: Transport information

Not Regulated by US DOT for ground shipment

Ground transport
Not Regulated by US DOT

Transport by sea (IMDG)
Not regulated

Air transport (IATA)
Not regulated

SECTION 15: Regulatory information

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 as required on the pesticide label:

Signal word	:	CAUTION
Hazard statements	:	Harmful if swallowed or absorbed through skin. Causes eye irritation.
Precautionary statements	:	Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

SARA Title III Status
311/312 Hazard Categories: Immediate Health Hazard
313 Toxic Chemicals: None known

Other U.S. Federal Regulations
OSHA: This product is considered hazardous under the criteria of the OSHA Hazared Communication Standard 29 CFR Part 1910.1200

TSCA This product is exempt from TSCA regulation under FIFRA Section 3 (2) (B) (ii) when used as a pesticide.

CERCLA/DOT Reportable Quantities (RQ): Not applicable

US State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Tetrahydrofurfuryl Alcohol CAS 97-99-4	-	X	X

SECTION 16: Other information

NFPA Hazard Rating	HEALTH	1
	FLAMMABILITY	1
	REACTIVITY	1
	4=Severe 3=Serious 2=Moderate 1=Slight 0=Minimal	

SDS US

***Disclaimer**: The information provided by Rainbow Ecoscience. contained herein is given in good faith and correct to the best of our knowledge. However, the information given is designed only as guidance for safe handling, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.*