SAFETY DATA SHEET

Avaunt 15 EC

SDS #: 130000027381-2-GT-A

Revision date: 2020-07-26 Version 1

Format: BR



Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Avaunt 15 EC

Other means of identification

Product Code(s) 130000027381-2-GT-A

UN/ID no UN3082

Synonyms INDOXACARB: methyl

(S)-N-[7-chloro-2,3,4a,5-tetrahydro-4a-(methoxycarbonyl)indeno[1,2-e][1,3,4]oxadiazin-2-yl

carbonyl]-4'-(trifluoromethoxy)carbanilate (IUPAC name); methyl

(4aS)-7-chloro-2,5-dihydro-2-[[(methoxycarbonyl)[4-(trifluoromethoxy)phenyl]amino]carbony

I]indeno[1,2-e][1,3,4]oxadiazine-4a(3H)-carboxylate (CAS name)

Active Ingredient(s) Indoxacarb

Formula C₂₂H₁₇ClF₃N₃O₇ (Indoxacarb)

Chemical Family Oxadiazine

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide.

Restrictions on Use: Use as recommended by the label.

Details of the supplier of the safety data sheet

Formulator HELENA INDUSTRIES, L.L.C.

434 Fenn Road,

Cordele, Georgia 31010,

USA

Emergency telephone number:

911

Guatemala - Center of Toxicological Information and Assistance - (502) 2251-3560 / 2232-0735

El Salvador - Rosales National Hospital - (503) 2231-9262

Honduras - Hospital School - (504) 232-6105

Nicaragua - National Center of Toxicology - (505) 2289-4700 ext. 1294 cel. 8755-0983

Costa Rica - National Center of Poisoning - (506) 2223-1028; 800-INTOXICA

Panama Center of Research and Information on Medications and Toxicology (507) 523-4948 Dominican Republic - Drug Information and Poisoning Center - (809) 562-6601 Ext. 1801

Section 2: HAZARDS IDENTIFICATION

General Hazards

This material is considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Acute toxicity - Oral Category 4

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Specific target organ toxicity (single exposure)	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

GHS Label elements, including precautionary statements



Signal Word: Danger

Hazard Statements

H302 - Harmful if swallowed

H370 - Causes damage to organs

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

Precautionary Statements - Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P273 - Avoid release to the environment

Precautionary Statements - Response

P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor

IF SWALLOWED

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up

Precautionary Statements - Disposal

P501 - Dispose of contents/container according to label directions

Other Information

Combustible liquid

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Pure substance/preparation Mixture

Chemical Family Oxadiazine

Hazardous Components

Chemical name	CAS-No	Weight %
Indoxacarb	173584-44-6	15
Isobutyl alcohol	78-83-1	1-5
Methyl alcohol	67-56-1	0.3533

Synonyms are provided in Section 1.

Section 4: FIRST AID MEASURES

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FIRST AID MEASURES

General Advice Do not induce vomiting or give anything by mouth to an unconscious person. Do not use

mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Bring the SDS, product label and package insert when seeking

medical assistance.

Eye Contact Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove

contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison

control center or doctor for further treatment advice.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Call a poison control center or doctor for further treatment advice.

Inhalation Move to fresh air. If person is not breathing, contact emergency medical services, then give

artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or

doctor for further treatment advice.

Ingestion Rinse mouth. Immediately call a POISON CENTER or doctor/ physician. Do not induce

vomiting unless told to do so by a poison control center or doctor. Never give anything by

mouth to an unconscious person.

Protection of first-aiders Avoid contact by using personal protective equipment. See Section 8 for more detail.

Most important symptoms and effects, both acute and delayed

Most important symptoms and effects, both acute and delayed

Central nervous system effects. May cause slight transient irritation at point of contact. Ingestion of large amounts of indoxacarb may cause alteration in blood cell count and or

anemia.

Indication of any immediate medical attention and special treatment needed

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, dry chemical, carbon dioxide (CO₂), or foam.

Unsuitable extinguishing media

Do not spread material with high pressure water streams.

Specific extinguishing methods

Evacuate area and fight fire from a safe distance. Very toxic to aquatic life with long lasting effects. Dike to prevent runoff.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Specific Hazards Arising from the Chemical

Combustible liquid. This material may burn when exposed to extreme heat, flame and other ignition sources. Closed containers may rupture if exposed to excess heat or flame due to build-up of internal pressure.

Hazardous Combustion Products

Carbon oxides (COx). Nitrogen oxides (NOx). Halogenated compounds.

Explosive properties

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Sensitivity to Mechanical Impact Not sensitive.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Ensure adequate ventilation. Remove all sources of ignition. Avoid contact with skin, eyes

and clothing.

For emergency responders Combustible liquid. Very toxic to aquatic life with long lasting effects.

Environmental Precautions

Environmental Precautions Prevention of fire and explosion. Keep material out of lakes, streams, ponds, and sewer

drains.

C. Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Remove all sources of ignition. Absorb with earth, sand or other non-combustible material

and transfer to containers for later disposal. Transfer to a closable, labeled salvage container for disposal by an appropriate method. Refer to section 13 of SDS for suitable

method of disposal.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling

Handling Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of

ignition. Avoid contact with skin, eyes and clothing.

Hygiene measures Do not eat, drink or smoke when using this product. Remove and wash contaminated

clothing before re-use.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

This product, as supplied, contains hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Hazardous Components

Chemical name	Brazil	Chile	Argentina	Venezuela	Mexico	ACGIH TLV
Glycerin 56-81-5			TWA: 10 mg/m ³	TWA: 10 mg/m ³	Mexico: TWA 10 mg/m ³	
Acetic Acid 64-19-7	TWA: 8 ppm TWA: 20 mg/m ³	TWA: 8.8 ppm TWA: 21.9 mg/m³ STEL: 15 ppm STEL: 37 mg/m³	TWA: 10 ppm STEL: 15 ppm	TWA: 10 ppm STEL: 15 ppm	Mexico: TWA 10 ppm Mexico: TWA 25 mg/m³ Mexico: STEL 15 ppm Mexico: STEL 37 mg/m³	STEL 15 ppm TWA: 10 ppm
Methyl alcohol 67-56-1	TWA: 156 ppm TWA: 200 mg/m³ Skin	TWA: 175 ppm TWA: 229 mg/m³ Skin STEL: 250 ppm STEL: 328	TWA: 200 ppm Skin STEL: 250 ppm	TWA: 200 ppm STEL: 250 ppm Skin	Mexico: TWA 200 ppm Mexico: STEL 250 ppm	STEL 250 ppm TWA: 200 ppm

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		mg/m³				
Isobutyl alcohol	TWA: 40 ppm	TWA: 44 ppm	TWA: 50 ppm	TWA: 50 ppm	Mexico: TWA 50	TWA: 50 ppm
78-83-1	TWA: 115 mg/m ³	TWA: 133 mg/m ³			ppm	

Appropriate engineering controls

Engineering measures Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection For dust, splash, mist or spray exposure, wear chemical protective goggles.

Skin and Body Protection Wear long-sleeved shirt, long pants, socks, and shoes.

Hand Protection Protective gloves

Respiratory Protection In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measuresDo not eat, drink or smoke when using this product. Remove and wash contaminated

clothing before re-use.

General informationThese recommendations apply to the product as supplied If the product is used in mixtures,

it is recommended that you contact the appropriate protective equipment suppliers.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State Liquid Appearance Liquid

Odor Pungent sweet pear

Color straw yellow

Odor threshold No information available pH 5.4 (1% solution)

Melting point/freezing point 88.1 °C

Boiling Point/Range No information available

Flash point 69 °C

Evaporation RateFlammability (solid, gas)
No information available
No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure
Vapor density
Specific gravity
Water solubility

No information available
2.5*10-8 Pa @ 25°C
No information available
No information available
0.2 ppm @ 25 °C

Solubility in other solvents @ 20°C Hexane 1.307 mg/L; Methanol 109.9 mg/L; Octanol 11.31 mg/mL; acetone,

Dimethylformamide, Dichloromethane, Acetonitrile, o-xylene, Ethyl acetate: > 250 mg/L

Surface tension No data available

Partition coefficient Kow=44.980, logKow=4.65

Autoignition temperature 255 °C

Decomposition temperatureNo information availableViscosity, kinematicNo information available

Viscosity, dynamic 4.68 mm2/s (20°C), 2.95 mm2/s (40°C)

Explosive properties Not explosive

Corrosivity No information available

Oxidizing properties Non-oxidizing

Softening point
Molecular weight
VOC content (%)
Relative density
No information available
No information available
No information available
0.947g/mL@20°C
No information available

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Section 10: STABILITY AND REACTIVITY

Reactivity

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Avoid extreme heat or cold. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

None known.

<u>Hazardous Decomposition Products</u>

Carbon oxides (COx). Nitrogen oxides (NOx). Halogenated compounds.

Section 11: TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral 976.8 mg/kg (rat)

LD50 Dermal > 5000 mg/kg (rat)

LC50 Inhalation (dust) > 5.2 mg/L 4 hr (rat)

Information on likely routes of exposure

Inhalation: Causes headache, drowsiness or other effects to the central nervous system

Eye Contact: May cause slight irritation

Skin Contact: May cause slight irritation

Ingestion: Causes headache, drowsiness or other effects to the central nervous system

Information on toxicological effects

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

Skin corrosion/irritation: Slightly or non-irritating (rabbit)

Serious eye damage/eye irritation: Slightly or non-irritating (rabbit)

Sensitization: Not a skin sensitizer

Mutagenicity: Indoxacarb: In vitro tests did not show mutagenic effects Did not show mutagenic effects in animal experiments

Carcinogenicity: Indoxacarb: Did not show carcinogenic effects in animal experiments

Reproductive toxicity: Indoxacarb: Animals testing did not show any effects on fertility.

STOT - single exposure: Indoxacarb: May cause damage to organs

Developmental toxicity: Indoxacarb: Animal testing showed effects on embryo-fetal development at levels equal to or above

those causing maternal toxicity

Target organ effects: Nervous system

Neurological effects: Indoxacarb: Central nervous system effects in animals

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Section 12: ECOLOGICAL INFORMATION

Toxic to aquatic life with long lasting effects.

Ecotoxicity

Duration	Species	Value	Units
96 h LC50	Fish	0.65	mg/L
48 h EC50	Daphnia	0.6	mg/L
14-day LC50	Earthworm	>1250	mg/kg
48-h LD50 contact	Bee	1000	ppm

Hazardous Components

Chemical name	, ,	Toxicity to daphnia and other aquatic invertebrates	Toxicity to algae
Indoxacarb	90 d early Life-Stage, NOEC	21-d, NOEC, Daphnia magna	
	Oncorhynchus mykiss (rainbow	(Water flea): 0.9 mg/l	
	trout): 0.15 mg/l		

Persistence and degradability: Indoxacarb: Not readily biodegradable.

Bioaccumulation: Indoxacarb is not expected to bioaccumulate with a BCF of 77.3.

Mobility: Low mobility in soil.

Chemical name	Partition coefficient
Isobutyl alcohol 78-83-1 (1-5 %)	0.79
Methyl alcohol 67-56-1 (0.3533 %)	-0.77

Other Adverse Effects: See product label for additional application instructions relating to environmental precautions

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods

Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

Contaminated containers and packages

Containers must be disposed of in accordance with local regulations. Refer to the product label for container disposal instructions. Do not reuse this container for any other purpose.

Section 14: TRANSPORT INFORMATION

IMDG/IMO:

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.(Indoxacarb)

Hazard class 9
Packing Group III
Environmental Hazards Yes

ICAO:

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.(Indoxacarb)

Hazard class 9
Packing Group III

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ICAO/IATA:

UN/ID no UN3082

Proper Shipping Name Environmentally hazardous substance, liquid, n.o.s.(Indoxacarb)

Hazard class 9
Packing Group III

Section 15: REGULATORY INFORMATION

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Indoxacarb 173584-44-6						Х		
Isobutyl alcohol 78-83-1	X	X	Х	X	X	Х	X	Х
Methyl alcohol 67-56-1	Х	X	X	X	X	X	X	Х

Section 16: OTHER INFORMATION

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Revision note No information available.

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