Safety Data Sheet - GHS

1. IDENTIFICATION: CHEMICAL PRODUCT AND COMPANY

PRODUCT NAME: INTEGO® SUITE Soybeans
EPA REGISTRATION NUMBER: 59639-205
VC NUMBER(S): 1959 (May include others for formulations with similar content and concentrations.)
SYNONYM(S): V-10385, UBI 7026-00, INTEGO® SUITE Seed Protectant
PRODUCT DESCRIPTION: Insecticide & Fungicide Mixture For Seed Treatment

INTEGO® is a registered trademark of Valent U.S.A. LLC

MANUFACTURER/DISTRIBUTOR
VALENT U.S.A. LLC
P.O. Box 5075
4600 Norris Canyon Road
San Ramon, CA 94583

EMERGENCY TELEPHONE NUMBERS
HEALTH EMERGENCY OR SPILL (24 hr):
(800) 892-0099
TRANSPORTATION (24 hr.): CHEMTREC
(800) 424-9300 or (202) 483-7616

PRODUCT INFORMATION
AGRICULTURAL PRODUCTS: (800) 682-5368

2. HAZARDS IDENTIFICATION

This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not the same as the FIFRA-required classifications on the product label. Certain sections of this SDS are superseded by federal law under EPA FIFRA for a registered pesticide. Please see Section 15, REGULATORY INFORMATION for an explanation.

Classification - (per U.S. OSHA 29 CFR 1910.1200 (Hazcom 2012))

Acute toxicity - Inhalation (Dusts/Mists)	Category 4

Label elements

EMERGENCY OVERVIEW

WARNING

Hazard statements
Harmful if inhaled

Precautionary statements

Prevention
Do not breathe dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area

Response

Eyes None.
Skin None.
Inhalation IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
Ingestion None.
FIRE None.
Spill None.

Storage
None

Disposal
None

Hazards not otherwise classified (HNOC)
Other Information
• Toxic to aquatic life with long lasting effects
<5% of the mixture consists of ingredient(s) of unknown toxicity

For information on Transportation requirements, see Section 14.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%	TRADE SECRET
Clothianidin	210880-92-5	18 - 22	
Ethaboxam	162650-77-3	2.5 - 3.5	
Ipconazole	125225-28-7	0.9 - 1.1	
Metalaxyl	57837-19-1	0.7 - 0.9	
Glycerin	56-81-5	1 - 3	*
Propane-1,2-diol	57-55-6	4 - 13	*
Other ingredients	Various CAS#s	56 - 73	*

Other ingredients, which may be maintained as trade secrets, are any substances other than an active ingredient contained in this product. Some of these may be hazardous, but their identities are withheld because they are considered trade secrets. The hazards associated with the other ingredients are addressed in this document. Specific information on other ingredients for the management of exposures, spills, or safety assessments can be obtained by a treating physician or nurse by calling **(800) 892-0099** at any time.

4. FIRST AID MEASURES

EMERGENCY NUMBER (800) 892-0099

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact **1-800-892-0099** for emergency medical treatment information.

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 poison control center or doctor for treatment advice.

SKIN CONTACT:
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.

INGESTION:
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 the poison control center or doctor. Do not give anything to an unconscious person.

INHALATION:
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.

NOTES TO PHYSICIAN:
Treatment is supportive and symptomatic.

5. FIRE FIGHTING MEASURES

Flash point °C
Flash point °F > 200 °F
AUTOIGNITION: No data available
EXTINGUISHING MEDIA: Water fog, carbon dioxide, foam, dry chemical
FLAMMABLE LIMITS IN AIR - LOWER (%): Not applicable
FLAMMABLE LIMITS IN AIR - UPPER (%): Not applicable

NFPA RATING:

Health:	1
Flammability:	1
Reactivity:	0
Special:	None

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using professional judgement. Values were not available in the guidelines or published evaluations prepared by the National Fire Protection Association, NFPA.

FIRE FIGHTING INSTRUCTIONS: Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse.

HAZARDOUS DECOMPOSITION PRODUCTS: May form toxic materials such as: carbon dioxide, hydrogen chloride, hydrogen cyanide (HCN), oxides of sulfur,, oxides of nitrogen,, carbon monoxide (CO), various hydrocarbons, etc.

6. ACCIDENTAL RELEASE MEASURES

VALENT EMERGENCY PHONE NUMBER: (800) 892-0099
CHEMTREC EMERGENCY PHONE NUMBER: (800) 424-9300
OBSERVE PRECAUTIONS IN SECTION 8: PERSONAL PROTECTION

Stop the source of the spill if safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. For additional spill response information refer to the North American Emergency Response Guidebook.

UN/NA NUMBER: Not applicable for Domestic Ground **EMERGENCY RESPONSE GUIDEBOOK NO.:** Not Applicable

FOR SPILLS ON LAND:

CONTAINMENT: Avoid runoff into storm sewers and ditches which lead to waterways. Contain spilled liquids with dry sorbents.

CLEANUP: Clean up spill immediately. Absorb spill with inert material (such as dry sand or earth), then place in a chemical waste container. Wash area with soap and water. Pick up wash liquid with additional absorbent and place in a chemical waste container.

FOR SPILLS IN WATER:

CONTAINMENT: This material is miscible in water. Stop or reduce contamination of any water. Isolate contaminated water.

CLEANUP: Clean up spill immediately. Absorb spill with inert material. Remove contaminated water for treatment or disposal.

7. HANDLING AND STORAGE

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

HANDLING:

Keep pesticide in original container. Do not store or transport near food or feed. Do not contaminate food or feed. Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers. Store in a cool, dry place, out of direct sunlight.

Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Keep container tightly closed. Keep container in a cool well ventilated area. Stable at normal temperatures and storage conditions in closed original package.

STORAGE:

Do not reuse empty container. To close package, replace and tighten cap to form an airtight seal. Open dumping is prohibited. Do not store at temperatures below 32ºF. If the product is exposed to temperatures below 32ºF, thaw at room temperature to 50ºF or warmer and shake gently to unify the product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

END USER MUST READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

EYES & FACE: Do not get this material in your eyes. Eye contact can be avoided by wearing protective eyewear.

RESPIRATORY PROTECTION: Use this material only in well ventilated areas. If operating conditions result in airborne concentrations of this material, the use of an approved respirator is recommended.

SKIN & HAND PROTECTION: All mixers, loaders, applicators and other handlers must wear long-sleeved shirt and long pants, shoes plus socks and chemical-resistant gloves. Some of the materials that are chemical-resistant to this product are barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, polyvinyl chloride and Viton®. For more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

ENGINEERING CONTROLS: Use in a well ventilated area.

EXPOSURE LIMITS

Chemical name	ACGIH Exposure Limits	OSHA Exposure Limits	Manufacturer's Exposure Limits
Clothianidin	None	None	None
Ethaboxam	None	None	None
Ipconazole	None	None	None
Metalaxyl	None	None	None
Glycerin	TWA of 15 mg/m³, total particulate	TWA: 15 mg/m³ mist, total particulate TWA: 5 mg/m³ mist, respirable fraction (vacated) TWA: 10 mg/m³ mist, total particulate (vacated) TWA: 5 mg/m³ mist, respirable fraction	None
Propane-1,2-diol	None	None	None
Other ingredients	Inhalable particles: 10 mg/m³ Respirable particles: 3 mg/m³	None	None

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid		
Appearance	No information available	**Odor**	Rancid oil odor
Color	Red	**Odor threshold**	No information available

PROPERTIES	Values	Remarks • Method
pH	5.87	1% (w/v) dilution in water
Melting point/freezing point	No information available	
Boiling point/boiling range	No information available	
Flash point	No information available > 200 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
Upper flammability limits	Not Applicable	
Lower flammability limit	Not Applicable	
Vapor pressure	No information available	
Vapor density	No information available	
Specific Gravity	No information available	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity	44.1 mPa s at 20 °C (or 44.1 cP)	
Explosive properties	No information available	
Oxidizing properties	No information available	
Liquid Density	1.14 g/cm³ or 9.51 lb/gal at 20 °C	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity
No data available

Chemical stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Conditions to avoid
Extremes of temperature and direct sunlight.

Incompatible materials
None known based on information supplied.

Hazardous Decomposition Products
May form toxic materials such as:. Carbon dioxide (CO2), Hydrogen chloride, Hydrogen cyanide, oxides of sulfur, oxides of nitrogen,, Carbon monoxide (CO), various hydrocarbons,. etc.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY:

Based on an evaluation of a similar product.

Oral Toxicity LD_{50} (rats)	3129 mg/kg	EPA Tox Category	III
Dermal Toxicity LD_{50} (rats)	> 5000 mg/kg	EPA Tox Category	IV
Inhalation Toxicity LC_{50} (rats)	> 2.05 mg/L	EPA Tox Category	IV
Eye Irritation (rabbits)	Non-irritating	EPA Tox Category	IV
Skin Irritation (rabbits)	Slightly irritating	EPA Tox Category	IV
Skin Sensitization (guinea pigs)	Non-sensitizer	EPA Tox Category	Not applicable

CARCINOGEN CLASSIFICATION

Chemical name	IARC Group 1 or 2	OSHA - Select Carcinogens	NTP Carcinogen List
Clothianidin	Not listed	Not listed	Not listed
Ethaboxam	Not listed	Not Listed	Not listed
Ipconazole	Not listed	Not Listed	Not listed
Metalaxyl	Not listed	Not Listed	Not listed
Glycerin	Not listed	Not Listed	Not listed
Propane-1,2-diol	Not listed	Not Listed	Not listed
Other ingredients	Not listed	Not Listed	Not listed

TOXICITY OF CLOTHIANIDIN TECHNICAL

SUBCHRONIC: The NOEL in a 3-month rat feeding study with Clothianidin Technical was 27.9 mg/kg/day (male) and 34.0 mg/kg/day (female) The NOEL in a 90-day dog feeding study was 19.3 mg/kg/day (male) and 21.2 mg/kg/day (female). In a subchronic dermal study with rats, the NOAEL is >1,000 mg/kg/day.

CHRONIC/CARCINOGENICITY: The Clothianidin NOEL for a 2-year rat study was 9.7 mg/kg/day (female); for a 18-month mouse study was 47.2 mg/kg/day (male) and for a 12-month dog study was 4.8 mg/kg/day (male). The principal target organs were the glandular stomach, kidney, ovary, and liver. No oncogenic effects were observed in the 2-year rat or 18-month mouse feeding studies.

NEUROTOXICITY: Clothianidin is not a neural toxin.

DEVELOPMENTAL TOXICITY: No teratogenic effects on rats or rabbits were observed. Transient developmental effects (delayed ossification) were observed in rabbits at maternally toxic doses (100 mg/kg/day). The technical material is fetotoxic in animal studies at maternally toxic doses.

REPRODUCTION: No reproductive effects were observed in rats at the highest dose tested (2500 ppm).

MUTAGENICITY: *In vivo* tests have demonstrated that the technical material is not mutagenic. Some *in-vitro* tests were positive for mutagenicity. The observed effects *in-vitro* were due to cytotoxic effects. The weight-of-evidence from the *in vivo* whole animal tests suggest that this product does not present a mutagenic hazard.

TOXICITY OF ETHABOXAM TECHNICAL

CHRONIC/CARCINOGENICITY: In a one-year dog study, Ethaboxam Technical produced no adverse effects up to 30 mg/kg/day (HDT). In a 2-year study in rats, Ethaboxam Technical produced adverse effects in the male reproductive organs and Interstitial/Leydig cell adenomas. The NOAEL for this study was 5.5 mg/kg/day. In a one-year mouse study with Ethaboxam Technical, no evidence of carcinogenicity was observed.

NEUROTOXICITY: Ethaboxam Technical was not neurotoxic in acute or subchronic neurotoxicity studies.

IMMUNOTOXICTY: Ethaboxam Technical was not immunotoxic when tested in rats using a modified plaque forming assay.

DEVELOPMENTAL TOXICITY: Developmental toxicity studies with Ethaboxam Technical at doses high enough to cause maternal toxicity produced developmental effects (abnormal liver lobation) in rats. Similar developmental effects were not observed in rabbits.

REPRODUCTION: Ethaboxam Technical was tested in a 2-generation rat reproduction study. Reduced body weight gain was noted at 650 ppm (HDT). Testicular lesions and reduced fertility were also observed in F1 males at this level. Decreased body weight and viability were observed at the highest dose tested. The parental, reproductive and offspring NOAEL was 200 ppm (16.2 mg/kg/day).

MUTAGENICITY: Genetic toxicity studies show that Ethaboxam Technical may cause numerical chromosome effects (via effects on the mitotic spindle), but does not cause gene mutations or structural chromosome aberrations.

TOXICITY OF IPCONAZOLE

SUBCHRONIC: In a subchronic study, ipconazole showed liver weight increase and effects on blood cells at 2000 ppm.

CHRONIC/CARCINOGENICITY: Chronic liver effects at high dose levels. No carcinogenicity observed.

DEVELOPMENTAL TOXICITY: Maternal toxicity was observed in teratogenicity studies with rats and rabbits at levels that showed effects in offspring.

REPRODUCTION: No effects observed.

MUTAGENICITY: Ipconazole is negative in mutagenicity assays

For a summary of the potential for adverse health effects from exposure to this product, refer to Section 2. For information regarding regulations pertaining to this product, refer to Section 15.

12. ECOLOGICAL INFORMATION

AVIAN TOXICITY:

The following information is based upon component(s) of this material.
96-hr Oral Bobwhite quail: > 2,000 mg/kg
96-hr Oral Mallard duck: = 503 mg/kg
96-hr Dietary Mallard duck: > 5,200 ppm

AQUATIC ORGANISM TOXICITY:

This product is toxic to aquatic invertebrates. The following are results from testing of product components.

The following are results from testing of Clothianidin Technical:
96-hr Bluegill LC_{50} : > 117 mg/L
96-hr Sheepshead minnow LC_{50} : > 102 mg/L
96-hr Mysid LC_{50} : = 0.053 mg/L

The following are results from testing of Ipconazole:
96-hr Common Carp LC_{50} : = 1.6 mg/L
72-hr Selenastrum capricoornutum LC_{50} : > 0.7 mg/L
48-hr Daphnia Magna EC_{50} : >1.5 mg/L

The following are results from testing of Metalaxyl:
96-hr Rainbow trout LC_{50} : > 100 mg/L
120-hr Freshwater Green Algae: = 33 mg/L
48-hr Daphnia magna LC_{50} : > 28 mg/L

The following are results from testing of Ethaboxam Technical:
LC_{50} (96 hr) Fathead Minnow: greater than 4.6 mg/L
LC_{50} (96 hr) Rainbow Trout: 2.3 mg/L
LC_{50} (96 hr) Sheepshead Minnow: greater than 3.1 mg/L
EC_{50} (48 hr) Daphnia magna: 0.35 mg/L
LC_{50} (96 hr) Mysid Shrimp: 0.42 mg/L
EC_{50} (96 hr) Oyster Shell Deposition: 0.38 mg/L
EC_{50} (96 hr) Green algae: greater than 3.6 mg/L

OTHER NON-TARGET ORGANISM TOXICITY:

The following information, based on studies with Clothianidin Technical, show that it is highly toxic to bees:

Honeybee 48-hr oral LD_{50}: 0.0038 ug (microgram)/bee
Honeybee 48-hr contact LD_{50}: 0.044 ug (microgram)/bee
Earthworm 7-day LC_{50}: 19 mg/kg dry soil

13. DISPOSAL CONSIDERATIONS

END USERS MUST DISPOSE OF ANY UNUSED PRODUCT AS PER THE LABEL RECOMMENDATIONS.

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

CONTAINER DISPOSAL: Do not reuse this container. Refer to pesticide label for proper container disposal instructions.

DISPOSAL METHODS: Check government regulations and local authorities for approved disposal of this material. Dispose of in accordance with applicable laws and regulations.

14. TRANSPORTATION INFORMATION

DOT (ground) SHIPPING NAME: Pesticides, liquid, non-regulated
REMARKS: Not regulated for domestic ground transport by U.S. DOT
EMERGENCY RESPONSE GUIDEBOOK NO.: Not applicable

ICAO/IATA SHIPPING NAME: UN 3082 Environmentally Hazardous Substance, Liquid, N.O.S. (Clothianidin), 9, III, Marine Pollutant
REMARKS: •Single or inner packaging less than 5 L (liquid) or 5 Kg net (solids) excepted from Dangerous Goods regulations -- see UN Special Provision 375. •For U.S. shipping, Emergency Response Guidebook No. 171.

IMDG SHIPPING NAME: UN 3082, Environmentally Hazardous Substance, Liquid, N.O.S. (Clothianidin), 9, III, Marine Pollutant
REMARKS: EMS# F-A, S-F

15. REGULATORY INFORMATION

EPA-FIFRA LABEL INFORMATION THAT DIFFERS FROM OSHA-GHS REQUIREMENTS:

Pesticide products in the U.S. are registered by the EPA under FIFRA and are subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required by OSHA GHS for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the FIFRA pesticide label:

EPA FIFRA SIGNAL WORD: CAUTION

- ***Harmful if swallowed***
- ***Keep out of reach of children.***

PESTICIDE REGULATIONS: All pesticides are governed under FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented below are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

U.S. FEDERAL REGULATIONS: Ingredients in this product are reviewed against an inclusive list of federal regulations. Therefore, the user should consult appropriate authorities. The federal regulations reviewed include: Clean Water Act, SARA, CERCLA, RCRA, DOT, TSCA and OSHA. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

SARA (311, 312):

Immediate Health:	No
Chronic Health:	No
Fire:	No
Sudden Pressure:	No
Reactivity:	No

STATE REGULATIONS: 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. The state regulations reviewed include: California Proposition 65, California Directors List of Hazardous Substances, Massachusetts Right to Know, Michigan Critical Materials List, New Jersey Right to Know, Pennsylvania Right to Know, Rhode Island Right to Know and the Minnesota Hazardous Substance list. For Washington State Right to Know, see Section 8 for Exposure Limit information. For Louisiana Right to Know refer to SARA information listed under U.S. Regulations above. If no components or information is listed in the space below this paragraph, then none of the regulations reviewed are applicable.

Glycerin

MA Right To Know	Present
NJ Right To Know	3319
PA Right To Know	Present
RI Right To Know	Listed
MN Hazardous Substance	Present

Propane-1,2-diol

NJ Right To Know	3595
PA Right To Know	Present
MN Hazardous Substance	Present

16. OTHER INFORMATION

REASON FOR ISSUE:	Minor change to Section 4, 8 and 15. Updated trademark status.
SDS NO.:	0467
EPA REGISTRATION NUMBER:	59639-205
REVISION NUMBER:	8
REVISION DATE:	08/26/2020
SUPERCEDES DATE:	01/16/2018
RESPONSIBLE PERSON(S):	Valent U.S.A. LLC, Corporate EH&S, (925) 256-2803

The information provided in this Safety Data Sheet (SDS) is provided in good faith and believed to be accurate at the time of preparation of the SDS. However, to the extent consistent with applicable law, Valent U.S.A. LLC and its subsidiaries or affiliates extend no warranties, make no representations, and assume no responsibility as to the accuracy, suitability, or completeness of such information. Additionally, to the extent consistent with applicable law, neither Valent U.S.A. LLC nor any of its subsidiaries or affiliates represents or guarantees that this information or product may be used without infringing the intellectual property rights of others. Except to the extent a particular use and particular information are expressly stated on the product label, it is the users' own responsibility to determine the suitability of this information for their own particular use of this product. If necessary, contact Valent U.S.A. LLC to confirm that you have the most current product label and SDS.

This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use as required by the Occupational Health and Safety Act (29 CFR 1910.1200, "Hazcom").

The product label provides information specifically for product use in the ordinary course. All necessary hazard classification and appropriate precautionary use, storage, and disposal information is set forth on that label or labeling accompanying the pesticide or to which reference is made on the label.