

ATTENDANT 600 FS

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/06/2017 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : ATTENDANT 600 FS
Other means of identification : EPA Reg. No. 400-607

1.2. Recommended use and restrictions on use

Recommended use : Seed treatment
Restrictions on use : Must not come into contact with food or be consumed.

1.3. Supplier

MacDermid Agricultural Solutions, Inc.
245 Freight Street
Waterbury, CT 06702 - USA
T 1-866-761-9397
sds.request@arysta.com

1.4. Emergency telephone number

Emergency number : FOR 24-HOUR MEDICAL EMERGENCY ASSISTANCE CALL PROPHARMA: 1-866-303-6952
or +1-651-603-3432
FOR 24-HOUR CHEMICAL EMERGENCY (Spill, leaks, fire, exposure or accident) call
CHEMTREC: 1-800-424-9300 or +1-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity (oral), Category 4	H302	Harmful if swallowed
Serious eye damage/eye irritation, Category 2B	H320	Causes eye irritation
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction
Specific target organ toxicity — Repeated exposure, Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400	Very toxic to aquatic life
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410	Very toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS-US labelling

Hazard pictograms (GHS-US) :



GHS07

GHS08

GHS09

Signal word (GHS-US) :

Warning

Hazard statements (GHS-US) :

H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H320 - Causes eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) :

P260 - Do not breathe mist, spray, vapours
P261 - Avoid breathing mist, spray, vapours
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

P272 - Contaminated work clothing must not be allowed out of the workplace
P273 - Avoid release to the environment
P280 - Wear eye protection, protective gloves, protective clothing
P301+P312 - If swallowed: Call a poison center/doctor/... if you feel unwell
P302+P352 - If on skin: Wash with plenty of water/...
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment (see supplemental first aid instruction on this label)
P330 - Rinse mouth
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

5.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)
5.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)
5.1% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Imidacloprid	(CAS-No.) 138261-41-3	48.9	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Irrit. 2B, H320 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Lignosulfonic acid, sodium salt	(CAS-No.) 8061-51-6	1 – 5	STOT RE 2, H373
1,2-benzisothiazolone	(CAS-No.) 2634-33-5	0.01 – 0.02	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Acute 1, H400

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Assure fresh air breathing. Allow the victim to rest.

First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

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

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a POISON CENTER or doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects : May cause damage to organs through prolonged or repeated exposure.

Symptoms/effects after skin contact : May cause an allergic skin reaction.

Symptoms/effects after eye contact : Causes eye irritation.

Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Use extinguishing media appropriate for surrounding fire. Foam. Dry powder. Carbon dioxide. Water spray. Sand.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Burning produces irritating, toxic and noxious fumes.
- Reactivity : No dangerous reactions known.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all eye and skin contact and do not breathe vapour and mist. Use personal protective equipment as required. Ensure adequate ventilation.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2. Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

Section 7: safe handling.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Use personal protective equipment as required. Avoid all eye and skin contact and do not breathe vapour and mist. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Do not store near food, foodstuffs, drugs, or potable water supplies. Keep container tightly closed. Keep only in the original container. Containers which are opened should be properly resealed and kept upright to prevent leakage.
- Incompatible products : Strong oxidizers. Strong bases. Strong acids.
- Incompatible materials : Sources of ignition. Direct sunlight.
- Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Imidacloprid (138261-41-3)

Not applicable

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Lignosulfonic acid, sodium salt (8061-51-6)		
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (Inhalable particulates not otherwise specified); 3 mg/m ³ (Respirable particulates not otherwise specified)
1,2-benzisothiazolone (2634-33-5)		
Not applicable		

8.2. Appropriate engineering controls

- Appropriate engineering controls : Avoid splashing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Prevent leakage or spillage. Prevent contaminated water run-off.

8.3. Individual protection measures/Personal protective equipment

- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear suitable gloves. Polyvinylalcohol (PVA). nitrile rubber gloves. Butyl rubber gloves. neoprene gloves. barrier laminate. VITON gloves. (>= 14 mils).
- Eye protection : Chemical goggles or safety glasses. Eyewash bottle with clean water.
- Skin and body protection : Impervious clothing.
- Respiratory protection : Where excessive vapour may result, wear approved mask. respirator with combination filter for vapour/particles.
- Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : suspension.
- Colour : tan
- Odour : No data available
- Odour threshold : No data available
- pH : 7
- Melting point : No data available
- Freezing point : No data available
- Boiling point : No data available
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Flammability (solid, gas) : Non flammable.
- Vapour pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : 1.24 @ 20 °C
- Solubility : No data available
- Log Pow : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Viscosity, kinematic : No data available
- Viscosity, dynamic : 550 mPa.s
- Explosive limits : No data available
- Explosive properties : No data available
- Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known.

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Likely routes of exposure : Inhalation; Skin and eye contact

Acute toxicity : Oral: Harmful if swallowed.

ATTENDANT 600 FS	
LD50 oral rat	> 200 mg/kg
LD50 dermal rat	> 4000 mg/kg
LC50 inhalation rat (mg/l)	7.44 mg/l/4h
ATE US (oral)	866.2827189058 mg/kg bodyweight
ATE US (vapours)	7.44 mg/l/4h
ATE US (dust,mist)	7.44 mg/l/4h

Imidacloprid (138261-41-3)	
LD50 oral rat	424 mg/kg
LD50 dermal rat	> 5000 mg/kg
ATE US (oral)	424 mg/kg bodyweight
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h

Lignosulfonic acid, sodium salt (8061-51-6)	
LD50 oral rat	> 12000 mg/kg

1,2-benzisothiazolone (2634-33-5)	
ATE US (oral)	500 mg/kg bodyweight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Causes eye irritation.
Respiratory or skin sensitisation : May cause an allergic skin reaction.
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

Reproductive toxicity : Not classified
Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified
Symptoms/effects after skin contact : May cause an allergic skin reaction.
Symptoms/effects after eye contact : Causes eye irritation.
Symptoms/effects after ingestion : Swallowing a small quantity of this material will result in serious health hazard. Harmful if swallowed.

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Very toxic to aquatic life with long lasting effects.

Imidacloprid (138261-41-3)	
LC50 fish 1	211 mg/l 96 h
EC50 Daphnia 1	85 mg/l 48 h
NOEC (acute)	50 mg/l 96 h
NOEC chronic crustacea	1.8 mg/l 21 d

Lignosulfonic acid, sodium salt (8061-51-6)	
LC50 fish 1	361 ppm 96h Pimephales promelas

12.2. Persistence and degradability

ATTENDANT 600 FS	
Persistence and degradability	Not established.

Lignosulfonic acid, sodium salt (8061-51-6)	
Persistence and degradability	Biodegrades slowly.
Biochemical oxygen demand (BOD)	0.021 g O ₂ /g substance (5 day/day); 0.043 g O ₂ /g (30 day/days)

12.3. Bioaccumulative potential

ATTENDANT 600 FS	
Bioaccumulative potential	Not established.

Imidacloprid (138261-41-3)	
Log Pow	-1.3

12.4. Mobility in soil

ATTENDANT 600 FS	
Ecology - soil	Not established.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods

Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Non bulk (<= 119 gallons / 450 liters) : Not regulated

Bulk (> 119 gallons / 450 liters):

Transport document description : UN3082 Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid), 9, III

UN-No.(DOT) : UN3082

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. (Imidacloprid)

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 9 - Class 9 (Miscellaneous dangerous materials)



ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Dangerous for the environment : Yes

Marine pollutant : Yes



Transport by sea

IMDG

Transport hazard class(es) (IMDG) : 9



Marine pollutant : Yes

UN-No. (IMDG) : 3082

Transport document description (IMDG) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imidacloprid), 9, III, MARINE POLLUTANT

Class (IMDG) : 9 - Miscellaneous dangerous substances and articles

Packing group (IMDG) : III - substances presenting low danger

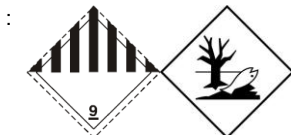
EmS-No. (Fire) : F-A

EmS-No. (Spillage) : S-F

Air transport

IATA

Transport hazard class(es) (IATA) : 9



Marine pollutant : Yes

UN-No. (IATA) : 3082

Transport document description (IATA) : UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Imidacloprid), 9, III

Class (IATA) : 9 - Miscellaneous Dangerous Goods

Packing group (IATA) : III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Imidacloprid (138261-41-3)

EPA TSCA Regulatory Flag Exempt from TSCA Regulation under FIFRA Section 3 (2)(B)(ii) when used as a pesticide.

Lignosulfonic acid, sodium salt (8061-51-6)

EPA TSCA Regulatory Flag XU - XU - indicates a substance exempt from reporting under the Inventory Update Reporting Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(C)).

This chemical is a pesticide product registered by the United States 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 (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.:

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

EPA Registration Number	400-607
FIFRA Signal Word	CAUTION
FIFRA Hazard Statement	Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.
FIFRA Other	This product is highly toxic to bees, birds and aquatic invertebrates. Treated seed exposed on soil surface may be hazardous to birds. For terrestrial uses, 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 washwater or rinsate. Cover or incorporate spilled treated seeds. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant discharge elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional office of the EPA. This compound is highly toxic to bees exposed directly (contact). Ensure that planting equipment is functioning properly in accordance with manufacturing recommendations to minimize seed coat abrasion during planting to reduce dust which can drift to blooming crops or weeds. Do not mix or allow to come in contact with an oxidizing agent. A hazardous chemical reaction may occur.

15.2. International regulations

CANADA

Imidacloprid (138261-41-3)

Not listed on the Canadian DSL (Domestic Substances List) inventory.

Lignosulfonic acid, sodium salt (8061-51-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

1,2-benzisothiazolone (2634-33-5)

Listed on the Canadian DSL (Domestic Substances List) inventory.

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Data sources

: ACGIH (American Conference of Government Industrial Hygienists).
European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/quest/information-on-chemicals/cl-inventory-database>.
Kristen Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition.
National Fire Protection Association; Fire Protection Guide to Hazardous Materials; 10th edition.
OSHA 29CFR 1910.1200 Hazard Communication Standard.

Other information

: None.

ATTENDANT 600 FS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-statements:

H302	Harmful if swallowed
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H320	Causes eye irritation
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

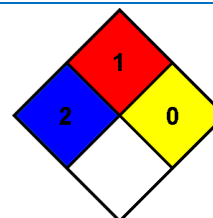
Abbreviations and acronyms:

	ATE: Acute Toxicity Estimate
	CAS (Chemical Abstracts Service) number
	EC50: Environmental Concentration associated with a response by 50% of the test population.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals).
	LD50: Lethal Dose for 50% of the test population
	STEL: Short Term Exposure Limits
	TWA: Time Weighted Average

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and not reactive with water.



SDS Prepared by: The Redstone Group, LLC.
6077 Frantz Rd
Suite 206
Dublin, Ohio, USA 43016
614.923.7472
www.redstonegrp.com

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product