



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Affirm™ WDG
EPA Reg. No.: 68173-3-1001
Product Type: Fungicide

Company Name: Nufarm Americas, Inc.
 11901 S. Austin Avenue
 Alsip, IL 60803
 1-800-345-3330

Telephone Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident,
 Call CHEMTREC Day or Night: 1-800-424-9300
 For Medical Emergencies Only, Call 1-877-325-1840

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 Certain sections are superseded by federal law governed by EPA for a registered pesticide.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

2. HAZARDS IDENTIFICATION

For EPA FIFRA-Specific Information see Section 15

2.1. Classification of the substance or mixture

| | |
|-------------------------------|-----------------|
| Classification (EC 1272/2008) | |
| Physical and Chemical Hazards | Not classified. |
| Human health | Not classified. |
| Environment | Not classified. |

Classification (1999/45/EEC) Not classified.
 The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008
 No pictogram required.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

| | | |
|------------------------------|---------|-----------------------------|
| Non-Hazardous components | | 80 – 100% |
| CAS No.: | EC No.: | |
| Classification (EC1272/2008) | | Classification (67/548/EEC) |

Not classified.

Not classified.

The active ingredient: polyoxin D zinc salt

10 – 30%

The nominal concentration of the AI: 11.3%

CAS No. 146659-78-1

EC No.:

CAS No. for the Polyoxin D zinc salt: 146659-78-1 (1:1 zinc salt)

Classification (EC 1272/2008)

Classification (67/578/EEC)

Acute Tox. 4 – H332

Xn;R20.

Eye Irrit. 2B – H320

Xi;R36.

Skin Sens. 1 – H317

R43.

Aquatic Acute 2 – H401

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation:

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Consult a physician for specific advice.

Ingestion

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Immediately rinse mouth and drink plenty of water (200-300 ml). Do not induce vomiting. Get medical attention if any discomfort continues.

Skin contact:

Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Continue to rinse for at least 15 minutes and seek medical attention.

Eye contact:

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2 Most important symptoms and effects, both acute and delayed

General information

No specific symptoms noted.

4.3 Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Extinguishing media

Fire can be extinguished using: Water spray. Dry chemicals.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products Not known.

5.3 Advice for firefighters

Special Fire Fighting Procedures

Keep up-wind to avoid fumes. Keep run-off water out of sewers and water sources. Dike for water control. Protective equipment for fire-fighters

Wear full protective clothing.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation.

6.2 Environmental precautions

Do not discharge onto the ground or into water courses.

6.3 Methods and material for containment and cleaning up

Stop leak if possible without risk. Shovel into dry containers. Cover and move the containers. Flush the area with water.

6.4 Reference to other sections

For waste disposal, see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Do not use in confined spaces without adequate ventilation and/or respirator. Provide good ventilation. Avoid handling which leads to dust formation. Avoid inhalation of dust and contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep away from food, drink and animal feeding stuffs.

7.3 Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Ingredient Comments: No exposure limits noted for ingredient(s).

8.2 Exposure controls

Protective equipment



Engineering measures:

Provide adequate general and local exhaust ventilation.

Respiratory equipment:

Dust mask/respirator.

Hand protection:

Use protective gloves.

Eye protection:

Wear goggles/face shield.

Other Protection:

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures:

Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance: Powder, dust
Colour: Dark brown
Odour: Earth
Explosive properties: Not explosive.

9.2. Other information

Not available.

Note: Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

10. STABILITY AND REACTIVITY**10.1 Reactivity**

No specific reactivity hazards associated with this product.

10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

10.3 Possibility of hazardous reactions

Not known.
Hazardous Polymerisation
Will not polymerise.

10.4 Conditions to avoid

Not known.

10.5 Incompatible materials

Materials To Avoid:
No incompatible groups noted.

10.6 Hazardous decomposition products

Not known.

11. TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects**

Toxic Dose 1 - LD 50 4916 mg/kg (oral rat)
Toxic Dose 2 - LD 50 4404 mg/kg (oral rat)

Acute toxicity:

Acute Toxicity (Dermal LD50)
> 2000 mg/kg Rat

Skin Corrosion/Irritation: Rabbit

Not irritating.

Serious eye damage/irritation:

Rabbit Moderately Irritating.

Respiratory or skin sensitisation:

Skin sensitisation
Buehler test: Guinea Pig Not Sensitising.

12. ECOLOGICAL INFORMATION**Ecotoxicity:**

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Acute Toxicity - Fish

LC50 96 hours 90 Cyprinus carpio (Common carp) ppm

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 6.59 mg/l Daphnia magna Acute Toxicity - Aquatic Plants

EC50 1.31 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

12.4. Mobility in soil

Mobility: No data

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not known.

13. DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Dispose of waste and residues in accordance with local authority requirements.

14. TRANSPORTATION INFORMATION

| | |
|-----------------------|---|
| General: | The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID). |
| Road Transport Notes: | Not regulated. |
| Rail Transport Notes: | Not regulated. |
| Sea Transport Notes: | Not regulated. |
| Air Transport Notes: | Not regulated. |

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

15. REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Statutory Instruments:**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Approved Code Of Practice:

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes:

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

EU Legislation

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1999/45/EC.

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

(EC) No 1272/2008 (CLP).

(EU) No 453/2010 (REACH ANNEX II update).

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

Risk Phrases in Full: NC Not classified. , R20 Harmful by inhalation. , R36 Irritating to eyes. , R43 May cause sensitisation by skin contact.

Hazard Statements In Full: H317 May cause an allergic skin reaction. , H320 Causes eye irritation. , H332 Harmful if inhaled. , H401 Toxic to aquatic life.

SAFETY DATA SHEET

Affirm™ WDG

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). 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, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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