



Safety Data Sheet

Issue Date: 04-Mar-2010

Revision Date: 30-Oct-2015

Version 2

1. IDENTIFICATION

Product Identifier

Product Name **Folpan 80WDG**

Other means of identification

SDS # ADAMA-070

Registration Number(s) EPA Reg. No. 66222-48
UN/ID No UN3077

Recommended use of the chemical and restrictions on use

Recommended Use EPA registered pesticide.

Details of the supplier of the safety data sheet

Manufacturer Address

Makhteshim Agan of North America, Inc. (d/b/a ADAMA)
3120 Highwoods Blvd., Suite 100
Raleigh, NC 27604
1-919-256-9300

Emergency Telephone Number

Emergency Telephone (24 hr) For fire, spill and/or leak contact INFOTRAC:
1-800-535-5053 (North America) 1-352-323-3500 (International)
For medical emergencies and health/safety inquiries, contact PROSAR:
1-877-250-9291

2. HAZARDS IDENTIFICATION

This chemical is a 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-EPA registered chemicals. Please see Section 15 for additional EPA information.

Appearance Off-white granules

Physical State Solid

Odor Faint Characteristic

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1
Germ cell mutagenicity	Category 2
Carcinogenicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 2

Signal Word**Danger****Hazard Statements**

Toxic if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
Suspected of causing cancer
May cause damage to organs through prolonged or repeated exposure

**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Contaminated work clothing should not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Folpet	133-07-3	77.6-82.4
Proprietary Solvent 1	Proprietary	<3
Proprietary Solvent 2	Proprietary	<2

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

General Advice	IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. When possible, have the product container or label with you when calling a poison control center or doctor or going for treatment.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Remove contaminated clothing and shoes. Wash affected areas thoroughly with soap and water for at least 15 minutes. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Immediately call a poison center or doctor/physician.

Most important symptoms and effects

Symptoms	May cause an allergic skin reaction. Irritating to eyes, respiratory system & skin. Exposed individuals may experience eye tearing, redness and discomfort. Repeated exposure may cause contact dermatitis.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Probably mucosal damage may contraindicate the use of gastric lavage.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO₂). Water spray (fog). Foam.

Small Fire Foam. Dry chemical or CO₂.

Large Fire Use foam or water spray.

Unsuitable Extinguishing Media Do not use a heavy water stream. Use of heavy stream of water may spread fire.

Specific Hazards Arising from the Chemical

Material is not combustible.

Hazardous Combustion Products Smoke, fumes or vapors, and oxides of carbon. Nitrogen oxides (NO_x). Hydrogen chloride. Sulfur oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Evacuate area of unprotected personnel. Remain upwind of fire to avoid hazardous vapors and decomposition products. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Avoid contact with skin, eyes or clothing. Avoid creating dust.
Environmental Precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, ECOLOGICAL INFORMATION. See Section 13: DISPOSAL CONSIDERATIONS.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Shovel waste material into properly labeled container. Avoid creating dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area. Avoid generation of dust. Contaminated work clothing should not be allowed out of the workplace.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Do not contaminate water, food, or feed by storage or disposal. Keep/store only in original container. Store locked up. Store at ambient conditions. Keep container tightly closed and store in a cool, dry and well-ventilated place. Store away from heat, sparks, flame.
Packaging Materials	Do not reuse container.
Incompatible Materials	Alkaline materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Proprietary Solvent 1	TWA: 5 ppm S*	TWA: 5 ppm TWA: 19 mg/m ³ (vacated) TWA: 5 ppm (vacated) TWA: 19 mg/m ³ (vacated) S* S*	IDLH: 250 ppm Ceiling: 15.6 ppm 15 min Ceiling: 60 mg/m ³ 15 min TWA: 5 ppm TWA: 19 mg/m ³

Appropriate engineering controls**Engineering Controls**

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS OF END USE PRODUCTS CONTAINING THIS MATERIAL, CONSULT THE SDS OR PRODUCT LABEL FOR THE END USE PRODUCT.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Wear safety glasses with side shields (or goggles).

Skin and Body Protection

Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear long-sleeved shirt, long pants, and shoes plus socks. Use chemical resistant gloves, such as P.V.C., butyl-rubber, nitrile-rubber, or neoprene.

Respiratory Protection

NIOSH-approved respirator or mask in the absence of adequate ventilation.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Take off all contaminated clothing and wash it before reuse. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Solid	Odor	Faint Characteristic
Appearance	Off-white granules	Odor Threshold	Not determined
Color	Off-white		
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>	
pH	8.404	(1% solution in water)	
Melting Point/Freezing Point	Not determined		
Boiling Point/Boiling Range	Not determined		
Flash Point	Not determined		
Evaporation Rate	Not applicable		
Flammability (Solid, Gas)	Not determined		
Upper Flammability Limits	Not determined		
Lower Flammability Limit	Not determined		
Vapor Pressure	Folpet: 11.6×10^{-5} Pa @ 40°C		
Vapor Density	Not determined		
Specific Gravity	Not determined		
Water Solubility	Insoluble in water		
Solubility in other solvents	Not determined		
Partition Coefficient	Not determined		
Auto-ignition Temperature	Not determined		
Decomposition Temperature	Not determined		
Kinematic Viscosity	Not determined		
Dynamic Viscosity	Not determined		
Explosive Properties	Not determined		
Oxidizing Properties	Not determined		
Bulk Density	0.7 g/mL @ 20°C		

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

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

Keep out of reach of children. Heat, flames and sparks. Avoid direct sunlight. High humidity is to be avoided.

Incompatible Materials

Alkaline materials.

Hazardous Decomposition Products

Smoke, fumes or vapors, and oxides of carbon. Nitrogen oxides (NOx). Hydrogen chloride. Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye irritation.

Skin Contact Causes skin irritation.

Inhalation Toxic if inhaled.

Ingestion Do not ingest.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Folpet 133-07-3	= 2636 mg/kg (Rat)	> 22600 mg/kg (Rabbit) > 5000 mg/kg (Rat)	> 0.48 g/m ³ (Rat) 4 h
Proprietary Solvent 1	= 317 mg/kg (Rat)	= 525 mg/kg (Rat) = 630 mg/kg (Rabbit)	= 316 mg/m ³ (Rat) 4 h
Proprietary Solvent 2	= 1288 mg/kg (Rat)	= 580 mg/kg (Rabbit)	> 3900 mg/m ³ (Rat) 1 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Sensitization May cause an allergic skin reaction.

Germ cell mutagenicity Suspected of causing genetic defects.

Carcinogenicity Suspected of causing cancer.

Chemical Name	ACGIH	IARC	NTP	OSHA
Proprietary Solvent 1		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Product Information (Numerical measures of toxicity)

Acute Oral LD50 (Rat): >5,000 mg/kg

Acute Dermal LD50 (Rabbit): >2,000 mg/kg

Acute Inhalation LC50 (Rat): 0.54 mg/L (4-hr)

Eye Irritation: Irritating.

Dermal Irritation: Moderately irritating.

Dermal Sensitization: A skin sensitizer.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects. This pesticide is highly toxic to fish. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water by cleaning of equipment or disposal of wastes.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Proprietary Solvent 1	46.42: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.0188 - 0.1044: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 187 - 279: 72 h Desmodesmus subspicatus mg/L EC50 static	11.9 - 50.5: 96 h Pimephales promelas mg/L LC50 flow-through 20.5 - 25.6: 96 h Pimephales promelas mg/L LC50 static 32: 96 h Pimephales promelas mg/L LC50 5.449 - 6.789: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 7.5 - 14: 96 h Oncorhynchus mykiss mg/L LC50 static 4.23 - 7.49: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 5.0 - 12.0: 96 h Oncorhynchus mykiss mg/L LC50 13.5: 96 h Lepomis macrochirus mg/L LC50 static 11.9 - 25.3: 96 h Lepomis macrochirus mg/L LC50 flow-through 11.5: 96 h Lepomis macrochirus mg/L LC50 semi-static 34.09 - 47.64: 96 h Poecilia reticulata mg/L LC50 static 31: 96 h Poecilia reticulata mg/L LC50 semi-static 27.8: 96 h Brachydanio rerio mg/L LC50 0.00175: 96 h Cyprinus carpio mg/L LC50 semi-static 33.9 - 43.3: 96 h Oryzias latipes mg/L LC50 flow-through 23.4 - 36.6: 96 h Oryzias latipes mg/L LC50 static	EC50 21 - 36 mg/L 30 min EC50 = 23.28 mg/L 5 min EC50 = 25.61 mg/L 15 min EC50 = 28.8 mg/L 5 min EC50 = 31.6 mg/L 15 min	4.24 - 10.7: 48 h Daphnia magna mg/L EC50 Static 10.2 - 15.5: 48 h Daphnia magna mg/L EC50

Proprietary Solvent 2	53: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50 30 - 100: 96 h <i>Desmodesmus subspicatus</i> mg/L EC50 117: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 3.59 - 15.6: 96 h <i>Pseudokirchneriella subcapitata</i> mg/L EC50 static	8 - 12.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 15 - 18.9: 96 h <i>Pimephales promelas</i> mg/L LC50 static 22.1 - 22.8: 96 h <i>Pimephales promelas</i> mg/L LC50 static 4.3 - 8.5: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static 4.62: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 4.2: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 7.97: 96 h <i>Brachydanio rerio</i> mg/L LC50 flow-through 9.9 - 20.1: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static 4.06 - 5.75: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 4.2 - 4.8: 96 h <i>Lepomis macrochirus</i> mg/L LC50 flow-through 4.5: 96 h <i>Lepomis macrochirus</i> mg/L LC50 5.8 - 7.5: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10.2 - 22.5: 96 h <i>Pimephales promelas</i> mg/L LC50 semi-static 6.2 - 9.6: 96 h <i>Pimephales promelas</i> mg/L LC50 13.5 - 18.3: 96 h <i>Poecilia reticulata</i> mg/L LC50 semi-static 10.8 - 16.6: 96 h <i>Poecilia reticulata</i> mg/L LC50 static 1.31: 96 h <i>Cyprinus carpio</i> mg/L LC50 semi-static	1.8: 48 h <i>Daphnia magna</i> mg/L EC50
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Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Proprietary Solvent 1	1.47
Proprietary Solvent 2	1.6

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods****Disposal of Wastes**

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

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 Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

US EPA Waste Number

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Proprietary Solvent 1	U188	Included in waste streams: F039, K001, K022, K087		U188

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Proprietary Solvent 1	Toxic Corrosive

14. TRANSPORT INFORMATION**DOT**

Package less than 882 Lbs. (400 Kg): Not regulated

Package over 882 Lbs. (400 Kg):

UN3077, Environmentally hazardous substances, solid, n.o.s. (Folpet), 9, PG III, Marine Pollutant

IATA

UN3077, Environmentally hazardous substances, solid, n.o.s. (Folpet), 9, PG III

IMDG**UN/ID No**

UN3077

Proper Shipping Name

Environmentally hazardous substances, solid, n.o.s. (Folpet)

Hazard Class

9

Packing Group

III

Marine Pollutant

This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

15. REGULATORY INFORMATION**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Folpet	Present	X		Present		Present	X	Present	X	X
Proprietary Solvent 1	Present	X		Present		Present	X	Present	X	X
Proprietary Solvent 2	Present	X		Present		Present	X	Present	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Proprietary Solvent 1	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Folpet - 133-07-3	133-07-3	77.6-82.4	1.0
Proprietary Solvent 1	Proprietary	2.4-2.6	1.0

CWA (Clean Water Act)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Proprietary Solvent 1	1000 lb	X	X	X

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Folpet - 133-07-3	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Folpet 133-07-3	X		
Proprietary Solvent 1	X	X	X

EPA Pesticide Registration Number EPA Reg. No. 66222-48

EPA Statement

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:

EPA Pesticide Label

Signal Word: Danger

Causes irreversible eye damage. Harmful if inhaled or absorbed through the skin. Causes skin irritation. Avoid breathing dust or spray mist. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Wash thoroughly with soap and water after handling, and before eating, drinking, chewing gum, using the toilet or using tobacco. Remove and wash contaminated clothing before reuse

Difference between SDS and EPA pesticide label

	EPA	OSHA
Signal Word	Danger	Danger
Acute toxicity - Dermal	Harmful if absorbed through the skin	N/A
Acute toxicity - Inhalation (Dusts/Mists)	Harmful if inhaled	Toxic if inhaled
Skin corrosion/irritation	Causes skin irritation	Causes skin irritation
Serious eye damage/eye irritation	Causes irreversible eye damage	Causes serious eye irritation
Skin sensitization	Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals	May cause an allergic skin reaction
Germ cell mutagenicity	N/A	Suspected of causing genetic defects
Carcinogenicity	N/A	Suspected of causing cancer
STOT - repeated exposure	N/A	May cause damage through prolonged or repeated exposure

16. OTHER INFORMATION**NFPA****Health Hazards**

2

Flammability

0

Instability

0

Special Hazards

None

HMIS**Health Hazards**

2

Flammability

0

Physical Hazards

0

Personal Protection

See section 8

Issue Date:

04-Mar-2010

Revision Date:

30-Oct-2015

Revision Note:

Updated format from 11-Nov-2014

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet