



# Safety Data Sheet

Issue Date: 26-Mar-2020

Revision Date: 08-Oct-2020

Version 1

## 1. IDENTIFICATION

### Product identifier

Product Name **Diverge Silk**

### Other means of identification

SDS # ADAMA-308

Registration Number(s) EPA Reg. No. 66222-286  
UN/ID No UN3082

### Recommended use of the chemical and restrictions on use

### 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 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 ProPharma Group:  
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 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** Liquid

**Physical state** Liquid

**Odor** Characteristic

### Classification

Acute toxicity - Oral

Category 4

### Signal Word

Warning

### Hazard statements

Harmful if swallowed



**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product

**Precautionary Statements - Response**

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
Rinse mouth

**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-%
Propanil	709-98-8	40.65
Zinc Oxide	1314-13-2	4.8
1,2 Propanediol	57-55-6	3.9
Ethoxylated Polyoxypropylene	9003-11-6	1.7
Phosphoric Acid	7664-38-2	0.7
Amorphous silica	Proprietary	0 - 10%
Alkyl Polyglycoside	132778-08-6	0.3
Tetrasodium EDTA	64-02-8	0.22
Xanthan gum	11138-66-2	0.18
Polyvinylpyrrolidone	9003-39-8	0.1
Benzisothiazolinone	2634-33-5	0.04

\*\*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

**Description of 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.

**Skin Contact**

Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes.

**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.

**Most important symptoms and effects, both acute and delayed****Symptoms**

Harmful if swallowed.

**Indication of any immediate medical attention and special treatment needed****Notes to Physician**

Treat symptomatically and supportively.

## 5. FIRE-FIGHTING MEASURES

### Suitable Extinguishing Media

Dry chemical. Carbon dioxide (CO<sub>2</sub>). Foam.

**Unsuitable Extinguishing Media** Not determined.

### Specific Hazards Arising from the Chemical

None known.

**Hazardous combustion products** Toxic fumes.

### 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.

### Environmental precautions

#### **Environmental precautions**

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS. See Section 12 for additional Ecological Information.

### 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**

Cover liquid spill with sand, earth or other non-combustible absorbent material. Sweep up and shovel into suitable containers for disposal. Dispose of in accordance with federal, state and local regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Advice on Safe Handling**

Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash face, hands and any exposed skin thoroughly after handling.

### 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 at ambient conditions.

#### **Packaging Materials**

Do not reuse container.

#### **Incompatible Materials**

None known based on information supplied.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc Oxide 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable particulate matter TWA: 2 mg/m <sup>3</sup> respirable particulate matter	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> fume (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) STEL: 10 mg/m <sup>3</sup> fume	IDLH: 500 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup> dust TWA: 5 mg/m <sup>3</sup> dust and fume STEL: 10 mg/m <sup>3</sup> fume
Phosphoric Acid 7664-38-2	STEL: 3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> (vacated) TWA: 1 mg/m <sup>3</sup> (vacated) STEL: 3 mg/m <sup>3</sup>	IDLH: 1000 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Amorphous silica	-	(vacated) TWA: 6 mg/m <sup>3</sup> TWA: 20 mppcf : (80)/(%) SiO <sub>2</sub> mg/m <sup>3</sup> TWA	-

### Appropriate engineering controls

#### Engineering Controls

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures, such as personal protective equipment

#### Eye/Face Protection

Wear safety glasses with side shields (or goggles). Refer to 29 CFR 1910.133 for eye and face protection regulations.

#### 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. Refer to 29 CFR 1910.138 for appropriate skin and body protection.

#### Respiratory Protection

NIOSH-approved respirator or mask in the absence of adequate ventilation. Refer to 29 CFR 1910.134 for respiratory protection requirements.

#### 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  
Appearance  
Color

Liquid  
Liquid  
Not determined

Odor  
Odor Threshold

Characteristic  
Not determined

#### Property

#### Values

#### Remarks • Method

pH  
Melting point / freezing point  
Boiling point / boiling range  
Flash point  
Evaporation Rate

7.96  
Not determined  
Not determined  
Not determined  
Not determined

<b>Flammability (Solid, Gas)</b>	Liquid-not applicable
<b>Flammability Limit in Air</b>	
<b>Upper flammability or explosive limits</b>	Not available
<b>Lower flammability or explosive limits</b>	Not available
<b>Vapor Pressure</b>	Not determined
<b>Vapor Density</b>	Not determined
<b>Relative Density</b>	Not determined
<b>Water Solubility</b>	Not determined
<b>Solubility in other solvents</b>	Not determined
<b>Partition Coefficient</b>	Not determined
<b>Autoignition temperature</b>	Not determined
<b>Decomposition temperature</b>	Not determined
<b>Kinematic viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Not determined
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined

**Other information**

**Bulk density** 1.21 g/cm3

## 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.

<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
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**Conditions to Avoid**

Keep out of reach of children.

**Incompatible materials**

None known based on information supplied.

**Hazardous decomposition products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure****Product Information**

<b>Eye Contact</b>	Avoid contact with eyes.
<b>Skin Contact</b>	Avoid contact with skin.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	Harmful if swallowed.

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Propanil 709-98-8	= 840 mg/kg ( Rat ) = 367 mg/kg ( Rat )	= 4830 mg/kg ( Rabbit )	= 2.8 mg/L ( Rat ) 4 h
Zinc Oxide 1314-13-2	> 5000 mg/kg ( Rat )	-	-
1,2 Propanediol 57-55-6	= 20 g/kg ( Rat )	= 20800 mg/kg ( Rabbit )	-
Ethoxylated Polyoxypropylene 9003-11-6	= 5700 mg/kg ( Rat ) = 16 g/kg ( Rat )	-	= 320 mg/m <sup>3</sup> ( Rat ) 4 h
Phosphoric Acid 7664-38-2	= 1530 mg/kg ( Rat )	= 2740 mg/kg ( Rabbit )	> 850 mg/m <sup>3</sup> ( Rat ) 1 h
Tetrasodium EDTA 64-02-8	= 10 g/kg ( Rat ) = 1658 mg/kg ( Rat )	-	-
Polyvinylpyrrolidone 9003-39-8	= 100 g/kg ( Rat )	-	-
Benzisothiazolinone 2634-33-5	= 1020 mg/kg ( Rat )	-	-

### Symptoms related to the physical, chemical and toxicological characteristics

#### 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

#### Carcinogenicity

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

Chemical name	ACGIH	IARC	NTP	OSHA
Amorphous silica		Group 3		
Polyvinylpyrrolidone 9003-39-8		Group 3		

#### Legend

*IARC (International Agency for Research on Cancer)  
Group 3 - Not Classifiable as to Carcinogenicity in Humans*

### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50 891.10 mg/kg  
Dermal LD50 11,623.00 mg/kg  
ATEmix (inhalation-dust/mist) 35.03 mg/L

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Very toxic to aquatic life with long lasting effects.

### Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Propanil 709-98-8	0.041: 120 h Pseudokirchneriella subcapitata mg/L EC50 0.22 - 0.39: 72 h Desmodesmus subspicatus mg/L EC50 static	3.7: 96 h Lepomis macrochirus mg/L LC50 static 1.8 - 3: 96 h Oncorhynchus mykiss mg/L LC50 static 7.7 - 9.5: 96 h Pimephales promelas mg/L LC50 flow-through 8.4 - 31: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.23: 96 h Pimephales promelas mg/L LC50 static 7.17: 96 h Cyprinus carpio mg/L LC50 static 10.0 - 15.0: 96 h Oncorhynchus mykiss mg/L LC50 flow-through	3.55: 48 h Daphnia magna mg/L EC50 Static 6.7: 48 h Daphnia magna mg/L EC50 1 - 1.3: 48 h Daphnia magna mg/L EC50 Flow through
Zinc Oxide 1314-13-2		1.55: 96 h Danio rerio mg/L LC50 static	
1,2 Propanediol	19000: 96 h Pseudokirchneriella	51400: 96 h Pimephales promelas	1000: 48 h Daphnia magna mg/L

57-55-6	subcapitata mg/L EC50	mg/L LC50 static 710: 96 h Pimephales promelas mg/L LC50 41 - 47: 96 h Oncorhynchus mykiss mL/L LC50 static 51600: 96 h Oncorhynchus mykiss mg/L LC50 static	EC50 Static 10000: 24 h Daphnia magna mg/L EC50
Phosphoric Acid 7664-38-2		3 - 3.5: 96 h Gambusia affinis mg/L LC50	4.6: 12 h Daphnia magna mg/L EC50
Tetrasodium EDTA 64-02-8	1.01: 72 h Desmodesmus subspicatus mg/L EC50	59.8: 96 h Pimephales promelas mg/L LC50 static 41: 96 h Lepomis macrochirus mg/L LC50 static	610: 24 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Not determined.

**Bioaccumulation**

There is no data for this product.

**Mobility**

Chemical name	Partition coefficient
Propanil 709-98-8	3.07
Benzisothiazolinone 2634-33-5	1.3

**Other Adverse Effects**

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected.

### 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.

**California Hazardous Waste Status**

Chemical name	California Hazardous Waste Status
Zinc Oxide 1314-13-2	Toxic
Phosphoric Acid 7664-38-2	Corrosive

## 14. TRANSPORT INFORMATION

**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT**

Pack size smaller than 119 Gal (450 Liters): Not Regulated

Bulk Packaging:

UN3082

**UN/ID No**

**Proper Shipping Name**

Environmentally hazardous substance, liquid, n.o.s. (Propanil)

**Hazard class**

9

**Packing Group**

III

**Marine Pollutant**

Yes.

**IATA**

**UN number**

UN3082

**Proper Shipping Name**

Environmentally hazardous substances, liquid, n.o.s. (Propanil)

**Transport hazard class(es)**

9

**Packing Group**

III

**Marine Pollutant**

Yes

**IMDG**

**UN number**

UN3082

**Proper Shipping Name**

Environmentally hazardous substances, liquid, n.o.s. (Propanil)

**Transport hazard class(es)**

9

**Packing Group**

III

**Marine Pollutant**

Yes

## 15. REGULATORY INFORMATION

**International Inventories**

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Propanil	X			X	X	X	X		X
Zinc Oxide	X	ACTIVE	X	X	X	X	X	X	X
1,2 Propanediol	X	ACTIVE	X	X	X	X	X	X	X
Ethoxylated Polyoxypropylene	X	ACTIVE	X		X	X	X	X	X
Phosphoric Acid	X	ACTIVE	X	X	X	X	X	X	X
Amorphous silica	X		X		X	X	X	X	X
Alkyl Polyglycoside	X	ACTIVE	X			X	X		X
Tetrasodium EDTA	X	ACTIVE	X	X	X	X	X	X	X
Xanthan gum	X	ACTIVE	X	X	X	X	X	X	X
Polyvinylpyrrolidone	X	ACTIVE	X		X	X	X	X	X
Benzisothiazolinone	X	ACTIVE	X	X	X	X	X	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**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Phosphoric Acid 7664-38-2	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	No
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 %
Propanil - 709-98-8	709-98-8	40.65	1.0
Zinc Oxide - 1314-13-2	1314-13-2	4.8	1.0

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc Oxide		X		
Phosphoric Acid	5000 lb			X

**US State Regulations****California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product contains the following substance(s) regulated under applicable state right-to-know regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propanil 709-98-8	X		
Zinc Oxide 1314-13-2	X	X	X
1,2 Propanediol 57-55-6	X		X
Phosphoric Acid 7664-38-2	X	X	X

**EPA Pesticide Registration Number** EPA Reg. No. 66222-286

**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**

xxx

**Difference between SDS and EPA pesticide label**

xxx

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

Not determined

**Flammability**

Not determined

**Instability**

Not determined

**Special Hazards**

Not determined

**HMIS****Health Hazards**

Not determined

**Flammability**

Not determined

**Physical hazards**

Not determined

**Personal Protection**

Not determined

**Issue Date:** 26-Mar-2020**Revision Date:** 08-Oct-2020**Revision Note:** New product**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**