



Safety Data Sheet

Issue Date: 22-Dec-2020

Revision Date: 22-Dec-2020

Version 1

1. IDENTIFICATION

Product identifier

Product Name Diverge EC

Other means of identification

SDS # ADAMA-320

Registration Number(s) EPA Reg. No. 66222-294
UN/ID No UN3082

Recommended use of the chemical and restrictions on use

Recommended Use Herbicide.

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 Amber to brown liquid

Physical state Liquid

Odor Characteristic

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 3

Signal Word

Danger

Hazard statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
Suspected of causing cancer



Precautionary Statements - Prevention

Obtain special instructions before use
 Do not handle until all safety precautions have been read and understood
 Avoid breathing dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area

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 water and soap
 Take off contaminated clothing and wash it before reuse
 If skin irritation occurs: Get medical advice/attention
 IF INHALED: Remove person to fresh air and keep comfortable for breathing
 Call a POISON CENTER or doctor
 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
 Rinse mouth

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-%
Propanil	709-98-8	25-50
Isophorone	78-59-1	< 28
C10 Amide	14433-76-2	15-25
Benzenesulfonic acid, C10-13-alkyl derivs., calcium salt	1335202-81-7	2 - < 3
2-Ethylhexanol	104-76-7	1-2
3,5,5-trimethylcyclohex-3-en-1-one	471-01-2	< 0.9

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. If eye irritation persists: Get medical advice/attention.
Skin Contact	Remove contaminated clothing and shoes. Wash off immediately with plenty of water for at least 15 minutes. Consult a physician if necessary.
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, both acute and delayed

Symptoms	Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically and supportively.
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5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

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

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

None known.

Hazardous combustion products Toxic fumes. Carbon oxides. Nitrogen oxides (NO_x). Hydrogen chloride.

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.

For Emergency Responders Follow all fire fighting procedures in Section 5.

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. 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. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin, eyes or clothing. Use only outdoors or in a well-ventilated area.

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.

Packaging Materials

Do not reuse container.

Incompatible Materials

Strong oxidizing agents. Strong acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isophorone 78-59-1	Ceiling: 5 ppm	TWA: 25 ppm TWA: 140 mg/m ³ (vacated) TWA: 4 ppm (vacated) TWA: 23 mg/m ³	IDLH: 200 ppm TWA: 4 ppm TWA: 23 mg/m ³

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).

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	Liquid	Odor	Characteristic
Appearance	Amber to brown liquid	Odor Threshold	Not determined
Color	Amber to brown		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	4-8	
Melting point / freezing point	Not determined	
Boiling point / boiling range	Not determined	
Flash point	104°C	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Liquid-not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	Not available	
Lower flammability or explosive limits	Not available	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	1.08	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition temperature	Not determined	
Decomposition temperature	Not determined	
Kinematic viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not an explosive	
Oxidizing Properties	Not an oxidizer	

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.
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Conditions to Avoid

Keep out of reach of children. Excessive heat and fire.

Incompatible materials

Strong oxidizing agents. Strong acids.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation.
Inhalation	Do not inhale.
Ingestion	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
Isophorone 78-59-1	= 1870 mg/kg (Rat)	= 1700 mg/kg (Rat) = 1390 mg/kg (Rat)	= 7 mg/L (Rat) 4 h
2-Ethylhexanol 104-76-7	= 3730 mg/kg (Rat)	= 1980 mg/kg (Rabbit)	> 227 ppm (Rat) 6 h
3,5,5-trimethylcyclohex-3-en-1-one 471-01-2	= 2950 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity	Suspected of causing cancer.
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Chemical name	ACGIH	IARC	NTP	OSHA
Isophorone 78-59-1	A3			

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Numerical measures of toxicity

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

Oral LD50	922.7 mg/kg
Dermal LD50	4445.6 mg/kg

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
Isophorone 78-59-1	51.1 - 342: 96 h Pseudokirchneriella subcapitata mg/L EC50 475.4: 72 h Desmodesmus subspicatus mg/L EC50	213 - 271: 96 h Pimephales promelas mg/L LC50 static 180 - 250: 96 h Lepomis macrochirus mg/L LC50 static 132 - 159: 96 h Pimephales promelas mg/L LC50 flow-through	117: 48 h Daphnia magna mg/L EC50
2-Ethylhexanol 104-76-7	11.5: 72 h Desmodesmus subspicatus mg/L EC50	29.7: 96 h Pimephales promelas mg/L LC50 static 10.0 - 33.0: 96 h Lepomis macrochirus mg/L LC50 static 32 - 37: 96 h Oncorhynchus mykiss mg/L LC50 static 7.5: 96 h Oncorhynchus mykiss mg/L LC50 27 - 29.5: 96 h Pimephales promelas mg/L LC50 flow-through	39: 48 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
Isophorone 78-59-1	1.66
2-Ethylhexanol 104-76-7	3.1

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.

14. TRANSPORT INFORMATION

Note

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

DOT

Not regulated if shipped in NON BULK packaging (single containers less than 119 gal) by ground transport

BULK Packaging (single containers larger than 119 gal):

UN/ID No

UN3082

Proper Shipping Name

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

Hazard class

9

Packing Group

III

Marine Pollutant

Yes.

IATA

Not regulated in single containers of 5L or less

Single containers larger than 5L each:

UN number

UN3082

Proper Shipping Name

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

Transport hazard class(es)

9

Packing Group

III

Description

Yes

IMDG

Not regulated in single containers of 5L or less

Single containers larger than 5L each:

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/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Propanil	X			X	X	X	X		X
Isophorone	X	ACTIVE	X	X	X	X	X	X	X
C10 Amide	X	ACTIVE	X	X	X	X	X		X
2-Ethylhexanol	X	ACTIVE	X	X	X	X	X	X	X
3,5,5-trimethylcyclohex-3-en-1-one				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)
Isophorone 78-59-1	5000 lb		RQ 5000 lb final RQ RQ 2270 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 %
Propanil - 709-98-8	709-98-8	45.26	1.0
Methylisobutyl ketone - 108-10-1	108-10-1	10	1.0
Diethanolamine - 111-42-2	111-42-2	2.75	1.0
Sulfuric Acid - 7664-93-9	7664-93-9	0.08	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
Isophorone		X	X	

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Propanil 709-98-8	X		
Isophorone 78-59-1	X	X	X
2-Ethylhexanol 104-76-7		X	X

EPA Pesticide Registration Number EPA Reg. No. XXXX

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:

22-Dec-2020

Revision Date:

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Revision Note:

New format

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