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29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Drewfloc™ 2270
polymer
™ Trademark, Solenis or its subsidiaries or affiliates,
registered in various countries

Recommended use of the chemical and restrictions on use

Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington Delaware 19808 United States of America RegulatoryRequestsNA@solenis.com	Emergency telephone number 1-844-SOLENIS (844-765-3647) / 606-329-5705 Product Information 1-844-SOLENIS (844-765-3647)
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin irritation : Category 2
Eye irritation : Category 2A
Specific target organ systemic toxicity - single exposure : Category 3 (Central nervous system)

GHS Label element


Hazard pictograms :



Signal Word : Warning

Hazard Statements : Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.

Precautionary Statements : **Prevention:**
Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

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Wash skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear eye protection/ face protection.
Wear protective gloves.

Response:

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

Storage:

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

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

Static Accumulating liquid


SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture
Chemical nature : Static Accumulator
Chemical nature : Defatter

Hazardous components


Chemical Name	CAS-No.	Classification	Concentration (%)
ALIPHATIC HYDROCARBON	254504001-5164	Flam. Liq. 4; H227 Skin Irrit. 2; H315 STOT SE 3; H336	>= 20.00 - < 30.00
POLYMER	254504001-5817	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 1.00 - < 1.50

Trade Secret Composition - Conceal the Identity + Concentration

 Strong bonds. Trusted solutions.		Page: 3
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SECTION 4. FIRST AID MEASURES

- General advice** : Move out of dangerous area.
Call a POISON CENTRE or doctor/physician if exposed or you feel unwell.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.
- If inhaled** : Move to fresh air.
If unconscious place in recovery position and seek medical advice.
Consult a physician after significant exposure.
- In case of skin contact** : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use.
- In case of eye contact** : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Protect unharmed eye.
- If swallowed** : Obtain medical attention.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed** : Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material.
This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity (See Section 2 - Swallowing) when deciding whether to induce vomiting.
Causes skin irritation.
Causes serious eye irritation.
May cause drowsiness or dizziness.
Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
stomach or intestinal upset (nausea, vomiting, diarrhea)
irritation (nose, throat, airways)
Lung irritation
confusion
irregular heartbeat
Convulsions

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Notes to physician : No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam
Carbon dioxide (CO2)
Dry chemical
- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide
Nitrogen oxides (NOx)
Hydrocarbons
- Specific extinguishing methods :

Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- Environmental precautions : Prevent product from entering drains.
Prevent further leakage or spillage if safe to do so.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

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Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : Avoid formation of aerosol.
 Provide sufficient air exchange and/or exhaust in work rooms.
 Do not breathe vapours/dust.
 Do not smoke.
 Container hazardous when empty.
 Avoid exposure - obtain special instructions before use.
 Avoid contact with skin and eyes.
 Smoking, eating and drinking should be prohibited in the application area.
 For personal protection see section 8.
 Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.
 Observe label precautions.
 Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION


Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
ALIPHATIC HYDROCARBON	254504001-5164	TWA	200 mg/m3 Non-aerosol (as total hydrocarbon vapor)	ACGIH
		REL	100 mg/m3	NIOSH/GUID E

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

Respiratory protection : A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain

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circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

In the case of vapour formation use a respirator with an approved filter.

- Hand protection
Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist.
- Skin and body protection : Wear resistant gloves (consult your safety equipment supplier).
Wear as appropriate:
impervious clothing
Safety shoes
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
- Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : viscous
- Physical state : liquid
- Colour : white, milky
- Odour : mild, hydrocarbon-like
- Odour Threshold : No data available
- pH : 6 - 8
- Melting point/freezing point : 0 °F / -18 °C
- Boiling point/boiling range : No data available
- Flash point : > 200.1 °F / > 93.4 °C

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Evaporation rate : < 1

Flammability (liquids) : Static Accumulating liquid

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : Approximate 1

Density : Approximate 1.05 g/cm³

Solubility(ies)

 Water solubility : No data available

 Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

 Viscosity, dynamic : No data available

 Viscosity, kinematic : No data available

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : oxidizers
 Strong acids
 Strong bases
 Strong oxidizing agents
 strong reducing agents

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Hazardous decomposition
products

carbon dioxide and carbon monoxide
Hydrocarbons

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:**ALIPHATIC HYDROCARBON:**

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC 50 (Rat, male and female): > 5.28 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: OECD Test Guideline 403
Assessment: No adverse effect has been observed in acute
inhalation toxicity tests.

Acute dermal toxicity : LD 50 (Rabbit): > 2,000 mg/kg
Assessment: No adverse effect has been observed in acute
dermal toxicity tests.

POLYMER:

Acute oral toxicity :
Assessment: The component/mixture is classified as acute
oral toxicity, category 4.

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Result: Repeated exposure may cause skin dryness or cracking.

Components:**ALIPHATIC HYDROCARBON:**


Result: Irritating to skin

POLYMER:

Result: Not irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

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Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin., Causes serious eye irritation.

Components:

ALIPHATIC HYDROCARBON:

Result: Mildly irritating to eyes

POLYMER:

Result: Corrosive to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause drowsiness or dizziness.

Components:

ALIPHATIC HYDROCARBON:

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Product:

May be fatal if swallowed and enters airways.

Further information

Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting., Concentrations substantially above the TLV value may cause narcotic effects., Solvents may degrease the skin.

Carcinogenicity:

IARC


No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): > 100 mg/l
 Exposure time: 96 h
 Test substance: Polymer
 Method: OECD Test Guideline 203
 Remarks: Test conducted using environmentally representative water.

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): > 100 mg/l
 Exposure time: 48 h
 Test substance: Polymer
 Method: OECD Test Guideline 202
 Remarks: Test conducted using environmentally representative water.

Toxicity to algae : IC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
 Exposure time: 72 h
 Test substance: Polymer
 Method: OECD Test Guideline 201
 Remarks: Test conducted using environmentally representative water.


Components:

ALIPHATIC HYDROCARBON:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l
 Exposure time: 96 h
 Test Type: semi-static test
 Test substance: WAF
 Method: OECD Test Guideline 203
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates : EL50 (Water flea (Daphnia magna)): 1.4 mg/l
 Exposure time: 48 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 202
 Remarks: Information given is based on data obtained from similar substances.

Toxicity to algae : EL50 (Pseudokirchneriella subcapitata (green algae)): > 1 - 3 mg/l
 Exposure time: 72 h
 Test Type: static test
 Test substance: WAF
 Method: OECD Test Guideline 201

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Remarks: Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEL (Water flea (Daphnia magna)): 0.48 mg/l
Exposure time: 21 d
Test Type: semi-static test
Test substance: WAF
Method: OECD Test Guideline 211
Remarks: Information given is based on data obtained from similar substances.

Persistence and degradability

Components:

ALIPHATIC HYDROCARBON:

Biodegradability : Result: Inherently biodegradable
Biodegradation: 58.6 %
Exposure time: 28 d
Method: OECD Test Guideline 301F

POLYMER:

Biodegradability : Biodegradation: > 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301E
Remarks: Information given is based on data obtained from similar substances.

Bioaccumulative potential

Components:

No data available

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:


Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal., Toxic to aquatic life with long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with

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chemical or used container.
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

Not dangerous goods

U.S. DOT - RAIL

Not dangerous goods

U.S. DOT - INLAND WATERWAYS

Not dangerous goods

TRANSPORT CANADA - ROAD

Not dangerous goods

TRANSPORT CANADA - RAIL

Not dangerous goods

TRANSPORT CANADA - INLAND WATERWAYS

Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods



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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

Not dangerous goods

MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

Not dangerous goods

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	yes
------------------	-----

Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Acute Health Hazard

US State Regulations

Pennsylvania Right To Know

POLYMER 254504001- 0.00 - 0.00
 5181

ALIPHATIC HYDROCARBON 254504001- 0.00 - 0.00
 5164

Trade Secret Composition - Conceal the Identity +
 Concentration

WATER 7732-18-5 0.00 - 0.00

New Jersey Right To Know


POLYMER 254504001- 0.00 - 0.00
 5181

ALIPHATIC HYDROCARBON 254504001- 0.00 - 0.00
 5164

ESTER 254504001- 0.00 - 0.00
 5414

POLYMER 254504001- 0.00 - 0.00
 5817

Trade Secret Composition - Conceal the Identity +
 Concentration

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WATER

7732-18-5

0.00 - 0.00

California Prop 65

Proposition 65 warnings are not required for this product based on the results of a risk assessment.

The components of this product are reported in the following inventories:

- TSCA : On TSCA Inventory
- DSL : All components of this product are on the Canadian DSL.
- AUSTR : On the inventory, or in compliance with the inventory
- NZIOC : On the inventory, or in compliance with the inventory
- ENCS : Not in compliance with the inventory
- KECL : On the inventory, or in compliance with the inventory
- PHIL : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECL (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

Registration: Trade Secret

Chemical Name	Identification number
ALIPHATIC HYDROCARBON	254504001-5164
POLYMER	254504001-5817

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SECTION 16. OTHER INFORMATION
Further information

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NFPA:	HMIS III:						
Flammability Health Instability Special hazard.	<table border="1"> <tr> <td>HEALTH</td> <td style="text-align: center;">2</td> </tr> <tr> <td>FLAMMABILITY</td> <td style="text-align: center;">1</td> </tr> <tr> <td>PHYSICAL HAZARD</td> <td style="text-align: center;">0</td> </tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH	2	FLAMMABILITY	1	PHYSICAL HAZARD	0
HEALTH	2						
FLAMMABILITY	1						
PHYSICAL HAZARD	0						

NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class III B

Full text of H-Statements referred to under sections 2 and 3.

H227	Combustible liquid.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.

Sources of key data used to compile the Safety Data Sheet

Key literature references and sources of data

SOLENIS Internal data

SOLENIS internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This MSDS has been prepared by the Solenis Environmental Health and Safety Department.

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).