SOLENIS. Strong bonds. Trusted solutions.	Page: 1
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc [™] 560 polymer [™] Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name

: Drewfloc™ 560

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	Emergency telephone number
sheet	1-844-SOLENIS (844-765-3647) / 606-329-5705
Solenis LLC	
500 Hercules Road	Product Information
Wilmington, Delaware 19808	1-844-SOLENIS (844-765-3647)
United States of America	, , ,
RegulatoryRequestsNA@solenis.com	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Eye irritation

: Category 2A

GHS Label element

Hazard pictograms



Signal Word

: Warning

Hazard Statements

Causes serious eye irritation.

Precautionary Statements

Prevention:

Wash skin thoroughly after handling. Wear eye protection/ face protection.

Response:

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.

Strong bonds Trusted solutions.	Page: 2
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc [™] 560 polymer [™] Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
AMMONIUM SALT	254504001-6511	Eye Irrit. 2A; H319	>= 30.00 - < 40.00

Trade Secret Composition - conceal identity + concentration

SECTION 4. FIRST AID MEASURES

General advice

: Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled

: If breathed in, move person into fresh air.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact

: First aid is not normally required. However, it is

recommended that exposed areas be cleaned by washing

with soap and water.

In case of eye contact

: Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

If swallowed

: 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

: Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through

the skin may include:

irritation (nose, throat, airways)
Causes serious eye irritation.

Notes to physician

: No hazards which require special first aid measures.

SECTION 5. FIREFIGHTING MEASURES

Strong boards Trusted solutions.	Page: 3
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc [™] 560 polymer [™] Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

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

: No hazardous combustion products are known

Specific extinguishing

methods

•

Product is compatible with standard fire-fighting agents.

Further information

: Standard procedure for chemical fires.

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 : Persons not wearing protective equipment should be excluded

from area of spill until clean-up has been completed.

Environmental precautions

: Prevent further leakage or spillage if safe to do so.

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.

Other information

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

SECTION 7. HANDLING AND STORAGE

Advice on safe handling

: Do not breathe vapours/dust.

Do not smoke.

Container hazardous when empty. Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the

application area.

For personal protection see section 8.

SOLENIS. Strong bonds Trusted solutions.	Page: 4
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

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.

Electrical installations / working materials must comply with

the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

: 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

Engineering measures

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.

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

Physical state

: liquid

Colour

: red brown

Odour

slight, sweet

Odour Threshold

: No data available

рΗ

: 2.3

STORE Strong bonds. Trusted solutions.	Page: 5
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc [™] 560 polymer [™] Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

Melting point/freezing point

: No data available

Boiling point/boiling range

: No data available

Flash point

: > 394 °F / > 201 °C

Evaporation rate

: No data available

Flammability (solid, gas)

: No data available

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

: No data available

Density

: Approximate 1.02 g/cm3

Solubility(ies)

Water solubility

: completely miscible

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.

Incompatible materials

: aluminum Bases

brass

Strong bonds Trusted solutions.	Page: 6
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc [™] 560 polymer [™] Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

Copper

galvanized metals

Mild steel

Strong oxidizing agents

Zinc

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of : Inhalation

exposure

Skin contact Eye Contact

Ingestion

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity

: LD 50 (Rat): > 2,000 mg/kg

Acute dermal toxicity

: LD 50 (Rat): > 2,000 mg/kg

Components:

AMMONIUM SALT:

Acute oral toxicity

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

Skin corrosion/irritation

Not classified based on available information.

Components:

AMMONIUM SALT:

Result: Possibly irritating to skin

Serious eye damage/eye irritation

Causes serious eye irritation.

Product:

Result: Irritating to eyes

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

Components:

AMMONIUM SALT: Result: Irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Strong bands. Trusted adulfions.	Page: 7
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

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

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Further information

Product:

Remarks: No data available

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish

: LC 50 (Oncorhynchus mykiss (rainbow trout)); > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC 50 (Water flea (Daphnia)): > 50 mg/l

Exposure time: 48 h

Toxicity to algae

: IC50 (Algae, algal mat (Algae)): > 50 mg/l

Exposure time: 72 h

Components:

AMMONIUM SALT:

Toxicity to algae

: EC50 (Algae, algal mat (Algae)): > 10 - 100 mg/l

Exposure time: 72 h

Strong bands Trusted solutions.	Page: 8
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

Persistence and degradability

Product:

Biodegradability

: Remarks: Not readily biodegradable.

Components:

No data available

Bioaccumulative potential

Product:

Bioaccumulation

: Remarks: Bioaccumulation is unlikely.

Components:

AMMONIUM SALT:

Bioaccumulation

: Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

: log Pow: < 0

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological

information

: No data available

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice

: Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with

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.

♦ SOLG	ens				Page: 9
SAFETY D	ATA SHEET			Revision I	Date: 07/21/2015
					it Date: 8/31/201
Drewfloc™ 560 ™ Trademark, S registered in var 580440	Solenis or its subsidiaries or affilia	tes,		SDS Numbe	er: 00000035708 Version: 1.2
SECTION 14. 1	RANSPORT INFORMATION				
International t	ransport regulations				
REGULATION	L DDODED OLUBBING MAKE	1 ±114 74 55	LOUBOIDIABY		
ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.
U.S. DOT - RO					
	Not dangerous goods				
I.S. DOT - RAIL					
.S. DOT - INLA	Not dangerous goods ND WATERWAYS Not dangerous goods				
	ND WATERWAYS				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods				
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO Not dangerous goods	ODS			
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO Not dangerous goods	ODS			
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO Not dangerous goods	ODS ON - CARGO	IGER		
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO Not dangerous goods L AIR TRANSPORT ASSOCIATI Not dangerous goods L AIR TRANSPORT ASSOCIATI Not dangerous goods	ODS ON - CARGO ON - PASSEN			
RANSPORT CA	ND WATERWAYS Not dangerous goods ANADA - ROAD Not dangerous goods ANADA - RAIL Not dangerous goods ANADA - INLAND WATERWAYS Not dangerous goods L MARITIME DANGEROUS GOO Not dangerous goods L AIR TRANSPORT ASSOCIATI Not dangerous goods	ODS ON - CARGO ON - PASSEN		ERIALS AND	

*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Strong bonds Trusted solutions.	Page: 10
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

Marine pollutant	no

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

SARA 313

Component(s)SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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

: This product contains one or more components that are not on

the Canadian DSL and have annual quantity limits.

AUSTR

: Not in compliance with the inventory

NZIOC

: Not in compliance with the inventory

ENCS

: Not in compliance with the inventory

KECL

: On the inventory, or in compliance with the inventory

PHIL

: Not in compliance with the inventory

IECSC

: Not in compliance with the inventory

Inventories

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

Registration: Trade Secret

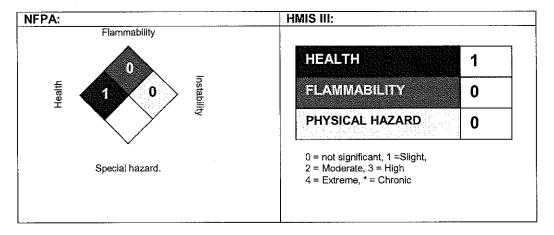
Chemical Name	Identification number
AMMONIUM SALT	254504001-6511

SOLENIS, Strong bards, Trusted solutions.	Page: 11
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 07/21/2015



NFPA Flammable and Combustible Liquids Classification

Combustible Liquid Class IIIB

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

H319

Causes serious eye irritation.

Further information

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).

CMR: Carcinogenic, Mutagenic or Toxic for Reproduction

FG: Food grade

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

STORE Strong bonds Trusted solutions.	Page: 12
SAFETY DATA SHEET	Revision Date: 07/21/2015
	Print Date: 8/31/2015
	SDS Number: 000000035708
Drewfloc™ 560 polymer ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 580440	Version: 1.2

H-statement: Hazard Statement

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization

ICAO-TI (ICAO): Technical Instructions by the "International Civil Aviation Organization"

IMDG: International Maritime Code for Dangerous Goods

ISO: International Organization for Standardization

logPow: octanol-water partition coefficient

LCxx: Lethal Concentration, for xx percent of test population

LDxx: Lethal Dose, for xx percent of test population. ICxx: Inhibitory Concentration for xx of a substance

Ecxx: Effective Concentration of xx N.O.S.: Not Otherwise Specified

OECD: Organization for Economic Co-operation and Development

OEL: Occupational Exposure Limit P-Statement: Precautionary Statement PBT: Persistent, Bioaccumulative and Toxic

PPE: Personal Protective Equipment STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value TWA: Time-weighted average

vPvB: Very Persistent and Very Bioaccumulative

WEL: Workplace Exposure Level

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act

DOT: Department of Transportation

FIFRA: Federal Insecticide, Fungicide, and Rodenticide Act HMIRC: Hazardous Materials Information Review Commission

HMIS: Hazardous Materials Identification System NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

PMRA: Health Canada Pest Management Regulatory Agency

RTK: Right to Know

WHMIS: Workplace Hazardous Materials Information System