		Page: 1
SAFETY DATA SHEET		Revision Date: 05/09/2019
		Print Date: 5/22/2019
		SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345		Version: 1.2

SECTION 1. IDENTIFICATION

Product identifier

Trade name : PerForm™ PC8975
Retention/Drainage/Clarification Aid
™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Retention, drainage and clarification aid for use in the pulp & paper industry

Details of the supplier of the safety data sheet Solenis LLC 500 Hercules Road Wilmington, Delaware 19808 United States of America (USA) RegulatoryRequestsNA@solenis.com	Emergency telephone number 1-844-SOLENIS (844-765-3647) Product Information Contact your local Solenis representative
---	--

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS label elements

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (%)
ORGANIC ACID	Trade Secret	Eye Irrit. 2A; H319	>= 1.5 - < 5
AMIDE	Trade Secret	Not a dangerous substance or mixture	>= 1.5 - < 5

SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

		according to the Globally Harmonised System (GHS).	
AMIDE	Trade Secret	Skin Irrit. 2; H315 Eye Irrit. 2A; H319	>= 0.1 - < 0.5

SECTION 4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- 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 : 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 : No symptoms known or expected.
- 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
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : Carbon monoxide
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
acid vapors
Ammonia

SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

- 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 : Avoid dust formation.
Avoid breathing dust.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
Comply with all applicable federal, state, and local regulations.
- 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 : Pick up and arrange disposal without creating dust.
Keep in suitable, closed containers for disposal.


SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Take measures to prevent the build up of electrostatic charge.
Provide appropriate exhaust ventilation at places where dust is formed.
- Advice on safe handling : Avoid dust formation.
Smoking, eating and drinking should be prohibited in the application area.
For personal protection see section 8.
- Conditions for safe storage : Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Electrical installations / working materials must comply with the technological safety standards.
- Materials to avoid : No materials to be especially mentioned.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible	Basis

 Strong bonds. Trusted solutions.		Page: 4
SAFETY DATA SHEET		Revision Date: 05/09/2019
		Print Date: 5/22/2019
		SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345		Version: 1.2

			concentration	
AMIDE	Trade Secret	TWA	10 mg/m3	US WEEL

Engineering measures : Provide appropriate exhaust ventilation at places where dust is formed.
General room ventilation should be adequate for normal conditions of use. However, if unusual operating conditions exist, 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 : No personal respiratory protective equipment normally required.

Eye protection : Safety glasses

Skin and body protection : Wear as appropriate:
Safety shoes
Wear resistant gloves (consult your safety equipment supplier).

Hygiene measures : Avoid breathing dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : solid

Colour : light yellow

Odour : No data available

Odour Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Boiling point/boiling range : No data available


Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Self-ignition : No data available

Upper explosion limit : No data available

	Page: 6
SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

strong reducing agents

Hazardous decomposition products : Carbon monoxide
Carbon dioxide (CO₂)
Nitrogen oxides (NO_x)
acid vapors
Ammonia

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Components:

ORGANIC ACID:

Acute oral toxicity : LD 50 (Rat): 3 g/kg

AMIDE:

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

Acute dermal toxicity : LD 50 (Rabbit): > 2 g/kg
Assessment: Not classified as acutely toxic by dermal absorption under GHS.

Skin corrosion/irritation

Not classified based on available information.

Components:

ORGANIC ACID:

Result: Slightly irritating to skin

AMIDE:


Result: Not irritating to skin

AMIDE:

Result: Irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

	Page: 7
SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

Product:

Remarks: Unlikely to cause eye irritation or injury.
 Product dust may be irritating to eyes, skin and respiratory system.

Components:

ORGANIC ACID:

Result: Severely irritating to eyes

AMIDE:

Result: Not irritating to eyes

AMIDE:

Result: Severely irritating 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.

Components:

AMIDE:

Genotoxicity in vitro : Test Type: Ames test
 Result: negative

Carcinogenicity

Not classified based on available information.

Components:

AMIDE:

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

IARC

Group 2B: Possibly carcinogenic to humans


COCO DIETHANOLAMIDE 68603-42-9

OSHA

No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP

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

	Page: 8
SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

by NTP.

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 28.7 mg/l
 Exposure time: 96 h
 Test Type: static test
 Method: OECD Test Guideline 203
 GLP: no
 Remarks: Test conducted using environmentally representative water.

Toxicity to daphnia and other aquatic invertebrates : LC 50 (Daphnia magna (Water flea)): > 50 mg/l
 Exposure time: 48 h
 Test Type: static test
 Method: OECD Test Guideline 202
 GLP: no
 Remarks: Test conducted using environmentally representative water.

Ecotoxicology Assessment

Acute aquatic toxicity : Acute aquatic toxicity Category 3; Harmful to aquatic life.

Chronic aquatic toxicity : Not classified based on available information.

Components:

ORGANIC ACID:

Toxicity to fish : LC 50 (Carassius auratus (goldfish)): 440 - 706 mg/l
 Exposure time: 96 h

SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

AMIDE:

Toxicity to fish : LC 50 (Leuciscus idus (Golden orfe)): > 6,810 mg/l
Exposure time: 96 h

LC 50 (Poecilia reticulata (guppy)): 17,500 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia magna)): 3,910 mg/l
Exposure time: 48 h
Method: Static

AMIDE:

Toxicity to fish : LC 50 (Danio rerio (zebra fish)): 3.6 mg/l
Exposure time: 96 h
Test Type: semi-static test

Toxicity to daphnia and other aquatic invertebrates : EC 50 (Water flea (Daphnia pulex)): 2.15 mg/l
Exposure time: 48 h
Test Type: static test

Toxicity to algae : EC 50 (Desmodesmus subspicatus (green algae)): 2.2 mg/l
Exposure time: 72 h

Persistence and degradability

Components:

AMIDE:

Biodegradability : Remarks: Expected to be ultimately biodegradable

AMIDE:

Biodegradability : Result: Readily biodegradable.

Bioaccumulative potential

Components:

AMIDE:

Bioaccumulation : Species: Green algae (Chlorella fusca vacuolata)
Bioconcentration factor (BCF): 11,700
Exposure time: 24 h
Concentration: 0.05 mg/l
Method: Static

Partition coefficient: n-octanol/water : log Pow: -2.11

SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

Mobility in soil

No data available

Other adverse effects

Product:

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water courses or the soil.

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.

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

SAFETY DATA SHEET

Revision Date: 05/09/2019

Print Date: 5/22/2019

SDS Number: 000000266614

Version: 1.2

PerForm™ PC8975 Retention/Drainage/Clarification Aid
 ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries
 872345

INTERNATIONAL MARITIME DANGEROUS GOODS

Not dangerous goods

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

Not dangerous goods

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

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

EPCRA - Emergency Planning and Community Right-to-Know Act

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

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:

DSL : All components of this product are on the Canadian DSL

AICS : On the inventory, or in compliance with the inventory

ENCS : Not in compliance with the inventory

		Page: 12
SAFETY DATA SHEET		Revision Date: 05/09/2019
		Print Date: 5/22/2019
		SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345		Version: 1.2

- KECI : On the inventory, or in compliance with the inventory
- PICCS : On the inventory, or in compliance with the inventory
- IECSC : On the inventory, or in compliance with the inventory
- TCSI : On the inventory, or in compliance with the inventory
- TSCA : On TSCA Inventory

TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 05/09/2019

Full text of H-Statements

- H315 : Causes skin irritation.
- H319 : Causes serious eye irritation.

Full text of other abbreviations

- Eye Irrit. : Eye irritation
- Skin Irrit. : Skin irritation

Further information

Other information : 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.

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.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -

	Page: 13
SAFETY DATA SHEET	Revision Date: 05/09/2019
	Print Date: 5/22/2019
	SDS Number: 000000266614
PerForm™ PC8975 Retention/Drainage/Clarification Aid ™ Trademark, Solenis or its subsidiaries or affiliates, registered in various countries 872345	Version: 1.2

Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

US / EN