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#### **SECTION 1. IDENTIFICATION**

**Product identifier** 

Trade name : Praestol™ K 111 L-NA

**FLOCCULANT** 

™ 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)
Solenis LLC	
500 Hercules Road	Product Information
Wilmington, Delaware 19808	Contact your local Solenis representative
United States of America (USA)	
, , ,	
RegulatoryRequestsNA@solenis.com	

# **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with 29 CFR 1910.1200

Serious eye damage : Category 1

**GHS** label elements

Hazard pictograms



Signal word : Danger

Hazard statements : H318 Causes serious eye damage.

Precautionary statements : Prevention:

P280 Wear eye protection/ face protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON

CENTER/doctor.

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#### Other hazards

None known.

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

## Components

Chemical name	CAS-No.	Classification	Concentration (%)
ALIPHATIC HYDROCARBON	Trade Secret	Flam. Liq. 4; H227 Asp. Tox. 1; H304	>= 20 - < 30
ALCOHOL ALKOXYLATES	Trade Secret	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 1.5 - < 5

Actual concentration is withheld as a trade secret

## **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

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 : In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

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

Causes serious eye damage.

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

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irregular heartbeat

Convulsions

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 when

deciding whether to induce vomiting.

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 monoxide Carbon dioxide (CO2)

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.

for firefighters

Special protective equipment : 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.

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.

Prevent product from entering drains. **Environmental precautions** 

Prevent further leakage or spillage if safe to do so.

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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.

#### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against

fire and explosion

Normal measures for preventive fire protection.

Advice on safe handling : Do not breathe vapours/dust.

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.

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.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on storage stability

No decomposition if stored and applied as directed.

## 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	Trade Secret	TWA (Mist)	5 mg/m3	OSHA Z-1
		TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
		TWA (Mist)	5 mg/m3	OSHA P0
		TWA (Mist)	5 mg/m3	NIOSH REL
		ST (Mist)	10 mg/m3	NIOSH REL

**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.

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# Personal protective equipment

Hand protection

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Safety glasses

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

Appearance : liquid

Colour : yellow

Odour : No data available

Odour Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

217 °F / 103 °C

Flash point :  $> 212 \, ^{\circ}\text{F} / > 100 \, ^{\circ}\text{C}$ 

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Self-ignition : No data available

Upper explosion limit / Upper

flammability limit

No data available

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Lower explosion limit / Lower :

flammability limit

No data available

Vapour pressure : No data available

Relative vapour density : No data available

Relative density : No data available

Density : 1.03 g/cm3 (77 °F / 25 °C)

Bulk density : 1.03 g/cm3 (68 °F / 20 °C)

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic :  $< 4,000 \text{ mPa.s} (68 \degree \text{F} / 20 \degree \text{C})$ 

> 7 mPa.s (104 °F / 40 °C)

Viscosity, kinematic : > 21 mm2/s (104 °F / 40 °C)

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 : Strong oxidizing agents

strong reducing agents

Hazardous decomposition

products

: Carbon monoxide

Carbon dioxide (CO2) Nitrogen oxides (NOx)

Hydrocarbons

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## **SECTION 11. TOXICOLOGICAL INFORMATION**

# **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.

**ALCOHOL ALKOXYLATES:** 

Acute oral toxicity : LD 50 (Rat): 1,380 mg/kg

## Skin corrosion/irritation

Not classified based on available information.

# **Components:**

## **ALIPHATIC HYDROCARBON:**

Result : Mildly irritating to skin

## **ALCOHOL ALKOXYLATES:**

Result : Not irritating to skin

## Serious eye damage/eye irritation

Causes serious eye damage.

**Product:** 

Remarks : May cause irreversible eye damage.

## **Components:**

### **ALIPHATIC HYDROCARBON:**

Result : Mildly irritating to eyes

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#### **ALCOHOL ALKOXYLATES:**

Result : Risk of serious damage 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.

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

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 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.

## Components:

#### **ALIPHATIC HYDROCARBON:**

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

#### **Further information**

## **Product:**

Remarks : No data available

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### **SECTION 12. ECOLOGICAL INFORMATION**

## **Ecotoxicity**

**Product:** 

Toxicity to fish : LC 50 (Pimephales promelas (fathead minnow)): 14.72 mg/l

> Exposure time: 96 h Test Type: static test

Test substance: Test conducted with a similar formulation

Method: OECD Test Guideline 203

GLP: no

LC 50 (Leuciscus idus (Golden orfe)): 17.32 mg/l

Exposure time: 96 h Test Type: static test

Test substance: Test conducted with a similar formulation

Method: OECD Test Guideline 203

GLP: no

Toxicity to daphnia and other :

aquatic invertebrates

EC 50 (Daphnia magna (Water flea)): 0.58 mg/l

Exposure time: 48 h Test Type: static test

Test substance: Test conducted with a similar formulation

Method: OECD Test Guideline 202

GLP: no

**Ecotoxicology Assessment** 

Acute aquatic toxicity Acute aquatic toxicity Category 1; Very toxic to aquatic life.

Chronic aquatic toxicity : Not classified based on available information.

## **Components:**

## **ALIPHATIC HYDROCARBON:**

**Ecotoxicology Assessment** 

Acute aquatic toxicity : No toxicity at the limit of solubility

Chronic aquatic toxicity No toxicity at the limit of solubility

**ALCOHOL ALKOXYLATES:** 

Toxicity to fish LC50 (Fish): > 1 - 10 mg/l

> Exposure time: 96 h Test Type: static test

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): > 1 - 10 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to daphnia and other : EC50 (Daphnia (water flea)): 0.17 mg/l

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aquatic invertebrates (Chronic toxicity)

Exposure time: 21 d

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Persistence and degradability

**Components:** 

**ALCOHOL ALKOXYLATES:** 

Biodegradability : Result: Readily biodegradable.

**Bioaccumulative potential** 

No data available

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.

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.

# **SECTION 14. TRANSPORT INFORMATION**

International Regulations

**IATA-DGR** 

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Not regulated as a dangerous good

#### **IMDG-Code**

Not regulated as a dangerous good

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

## **National Regulations**

#### **49 CFR**

Not regulated as a dangerous good

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

### **SECTION 15. REGULATORY INFORMATION**

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

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
ACRYLAMIDE	79-06-1	5000	*

<sup>\*:</sup> Calculated RQ exceeds reasonably attainable upper limit.

### 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 : Serious eye damage or eye irritation

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.

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

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

the Canadian DSL and have annual quantity limits.

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

ENCS : Not in compliance with the inventory

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

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

TSCA : All substances listed as active on the 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**

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#### **Full text of H-Statements**

H227 : Combustible liquid. H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.

H318 : Causes serious eye damage.

#### Full text of other abbreviations

Acute Tox. : Acute toxicity
Asp. Tox. : Aspiration hazard
Eye Dam. : Serious eye damage
Flam. Liq. : Flammable liquids

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA PO : USA. OSHA - TABLE Z-1 Limits for Air Contaminants -

1910.1000

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1

Limits for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA P0 / TWA : 8-hour time weighted average OSHA Z-1 / TWA : 8-hour time weighted average

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 - 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

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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

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 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. This SDS has been prepared by the Solenis Environmental Health and Safety Department.

US / EN