

FBSCIENCES INC Safety Data Sheet SloN Plus

SECTION 1: Identification

Product identifier

Product name SloN Plus

Recommended use of the chemical and restrictions on use

Slow release nitrogen fertilizer

Supplier's details

Name FBSciences Inc

Address 153 North Main Street Suite 100

Collierville TN 38017

USA

Telephone 901-221-1200

Emergency phone number(s)

CHEMTREC 1-800-424-9300

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200)

Not a hazardous substance or mixture.

GHS label elements, including precautionary statements

Not a hazardous substance or mixture.

Other hazards which do not result in classification

Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Urea, polymer with ammonia and formaldehyde (CAS no.: 27967-29-9)	65 % (weight), Trade secret*
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

Trade secret statement (OSHA 1910.1200(i))

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

In case of skin contact Wash off with soap and plenty of water.

In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes. Get medical

attention if symptoms occur.

If swallowed Call a poison center or doctor if you feel unwell. If vomiting occurs naturally, have

victim lean forward to reduce the risk of aspiration. Do NOT induce vomiting unless

directed to do so by medical personnel. Never give anything by mouth to an

unconscious person.

Acute and delayed symptoms and effects: May cause gastrointestinal irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and

diarrhea.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Treat symptomatically

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Water spray. Dry powder. Foam. Carbon dioxide.

Specific hazards arising from the chemical

An elevated temperature may release toxic gases such as carbon monoxide CO, carbon dioxide CO2, hydrocyanic acid HCN, formaldehyde CH20, and nitrogen oxides (NO)x.

Special protective actions for fire-fighters

Do not enter the fire area without full protective clothing, including a self-contained breathing apparatus.

SECTION 6: Accidental release measures

^{*}exact percentage is witheld as a trade secret.

Personal precautions, protective equipment and emergency procedures

Avoid all contact with skin, eyes, and clothing. Handle in conformance with good hygiene and safety practices. Information concerning personal protective measures are found in section 8.

Environmental precautions

Prevent entry into sewers and drinking water or into public waters. Assure conformity with the local regulations before discharging into sewage treatment facilities. Inform the competent authorities.

Methods and materials for containment and cleaning up

Clean up any spills as soon as possible, using an absorbent material to collect it.

Use adequate disposal containers.

The spills will be handled by qualified cleaning personnel, equipped with adequate respiratory and eye protection.

Reference to other sections

Other information concerning the control of exposure and personal protection, as well as considerations on handling, are found in sections 8 and 13.

SECTION 7: Handling and storage

Precautions for safe handling

Handle in conformity with good hygiene and safety practices.

Inform workers on the possible hazard that can be caused by the emanation of formaldehyde and ammonia during "processing".

Protection against fire and explosion: No specific precautions

Conditions for safe storage, including any incompatibilities

Assure general extraction or ventilation of the premises in order to reduce the concentration of vapours. Keep the storage area around 20°C. Provide a retention tank. During the implementation of the product, wear approved respiratory protection equipment. Stability in storage: This product is chemically stable and may be kept for a long time (approximately 2 years) if stored at a temperature between +10 and 30°C in closed containers or storage devices. If, by mistake, it is stored at a temperature lower than 0°C, or if it is put into contact with other chemical products, the start of polymerisation may begin and flocculation at the bottom of the container or an increase in viscosity may appear. Check the development of the temperature, the pH and the viscosity during the course of the extended storage. During the implementation of the product, wear approved respiratory protection equipment.

Storage materials:

Stainless steel or protected steel with an epoxy resin. Forbidden: copper, ordinary steel, and aluminium.

Incompatible products: acids.

Handling:

This product is not hazardous, however, it is to be handled according to good industrial hygiene and safety procedures. Ensure prompt removal from eyes, skin and clothing. Wash hands and any other exposed area with mild soap and water, before eating, drinking, and smoking and before leaving work. Provide appropriate ventilation and evacuation at the equipment level. Provide showers and eye showers.

SECTION 8: Exposure controls/personal protection

Control parameters

1. Urea, polymer with ammonia and formaldehyde (CAS: 27967-29-9)

Appropriate engineering controls

Personal protective equipment

-Personal protection: In general, avoid any unnecessary exposure. The control and handling must be carried out by qualified personnel.

Individual protection measures, such as personal protective equipment (PPE)

Eve/face protection

Anti-splash glasses or safety glasses.

Skin protection

If contact with skin or contamination of clothing is possible, wear protective clothing.

Body protection

Hand protection: Wear appropriate, chemical-resistant gloves.

Respiratory protection

In case of risk of excessive exposure, wear an appropriate mask.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)

Liquid

Odor Light odor of formaldehyde

Odor threshold No data available.

pH 9-11

Melting point/freezing point

No data available.

Initial boiling point and boiling range

No data available.

Flash point

Flash point

No data available.

Evaporation rate

No data available.

No data available.

Flammability (solid, gas)

Upper/lower flammability limits

Upper/lower explosive limits

No data available.

No data available.

No data available.

Vapor pressureNo data available.Vapor densityNo data available.Relative density1.10-1.40 (at 20°C)Solubility(ies)soluble in waterPartition coefficient: n-octanol/waterNo data available.

Auto-ignition temperature

No data available.

Decomposition temperature

No data available.

10-40 mPa s (25°C)

Viscosity 10-40 mPa.s (25°C) Explosive properties No data available. Oxidizing properties No data available.

Other safety information

No data available.

SECTION 10: Stability and reactivity

Reactivity

No hazardous reactions if stored and handled according to the advice and recommendations.

Chemical stability

The product is chemically stable under the recommended storage conditions (10 - 30°C)

Possibility of hazardous reactions

During the action of acids or through heating, there may be emanations of formaldehyde, which may act as a sensitiser and irritant.

Conditions to avoid

Exposure to elevated temperatures or contact with strong acids may cause polymerisation - non explosive - of the fertilizer.

Incompatible materials

Substances to avoid:

Organic peroxides, strong bases, strong acids, acid anhydrides, amino derivatives, phenols...

Hazardous decomposition products

Thermal decomposition may generate formaldehyde and carbon monoxide CO, CO2, ammonia, nitrogen oxides, and hydrocyanic acid. Hazardous reaction: Reacts with strong oxidisers.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

If inhaled: By reason of its composition, SloN Plus is not considered toxic if inhaled;

If swallowed: By reason of its composition, SloN Plus is not considered toxic if swallowed; ingestion may cause irritation of mucous membranes and gastro-intestinal problems.

DL (50) rat (oral): No data available.

Skin corrosion/irritation

In case of skin contact: It must not be considered as an irritant for the skin; but if there is prolonged or repeated contact, there is a possibility of irritation.

Serious eye damage/irritation

In case of eye contact: It must not be considered as an irritant for the eyes; but if there is prolonged or repeated contact, there is a possibility of irritation.

Respiratory or skin sensitization

Repeated exposure if inhaled: At strong concentrations of vapours/fog, local irritation at a respiratory level and the odour of ammonia are possible.

Germ cell mutagenicity

Formaldehyde is classified as a Mutagen Category 2

Carcinogenicity

Formaldehyde is classified as a Carcinogenic Category 1B

Reproductive toxicity

Fertility: No proven toxic effects on fertility.

Foetal development: Absence of birth defects and embryo toxic effects at non-toxic doses to

mothers.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Additional information

Specific effects: CONCERNED SUBSTANCE: FORMALDEHYDE (<0.1% in the product)

SECTION 12: Ecological information

Toxicity

Evaluation of aquatic toxicity:

There is a high probability that the product is not harmful to aquatic organisms.

Toxicity for fish:

- LC50 (96h): > 10,000 mg/L
- EC50 (48h): > 10,000 mg/l daphnia magna
- NOEC: 47 mg/l- Algae [mg/l]

Persistence and degradability

Easily biodegradable

Bioaccumulative potential

Low bioaccumulative potential

Mobility in soil

Mobility study between various environmental areas:

No data available.

Results of PBT and vPvB assessment

The product does not contain any substance fulfilling PBT criteria (persistent/Bio accumulative/Toxic) or vPvB criteria (very Persistent / very Bio accumulative).

Other adverse effects

The product does not contain any substances that are listed in the regulation (EC) 1005/2009 on substances that destroy the ozone layer. The product does not contain any substances that are listed in appendix I of the regulation (EC) 2037/2000 on substances that destroy the ozone layer.

SECTION 13: Disposal considerations

Disposal of the product

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Disposal of contaminated packaging

Dispose in a safe manner in accordance with local/national regulations

SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Canadian Domestic Substances List (DSL)

Chemical name: Urea, polymer with ammonia and formaldehyde

CAS: 27967-29-9

SECTION 16: Other information

Further information/disclaimer

The directions for use of this product are believed to be adequate and must be followed carefully. The use of this product is beyond the control of the manufacturer, and, therefore, to the extent consistent with applicable law, no warranty, representation, or guarantee of any kind, expressed or implied, is made as to the effects of such use or any results obtained if not used in accordance with printed directions and established safe practice or if unusual or extraordinary weather conditions occur. To the extent consistent with applicable law, the buyer's exclusive remedy and manufacturer's or seller's exclusive liability in tort or otherwise, shall be limited, at the manufacturer's option, to replacement of, or the repayment of the purchase price for, the quantity of product with respect to which damages are claimed.

The information and recommendations contained herein are based upon data believed to be correct. However, there is no guarantee or warranty of any kind expressed or implied made with respect to the information contained herein.