SAFETY DATA SHEET

LOONA FLOOR SOLUTION

1. IDENTIFICATION

Product name: LOONA FLOOR SOLUTION

Other means of identification (Article number):

DIN:

Recommended use: Cleaning agent Detergent/Degreaser

Restrictions on use

Uses advised against:

Manufacturer: Produits Loona
111 rue Beauvais
Saint-Jean-sur-Richelieu, QC,
Canada J2X 2R3
Telephone: 579-488-4960
www.loona.ca

Emergency telephone number: CANUTEC (24/7): +1 (613) 996-6666 or/ou *666 (cellu-lar/cellulaire)

2. HAZARD IDENTIFICATION

GHS classification in accordance with the Hazardous Products Regulations

Skin irritation: Category 2

Eye irritation: Category 2A

GHS label elements

Hazard pictograms:

Signal Word : Warning

Hazard Statements : H315 Causes slight skin irritation. H316 Causes serious eye irritation.

Precautionary Statements:

Prevention: P264 Wash skin thoroughly after handling. P280 Wear protective gloves/ eye protection/ face protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P332 + P313 If skin irritation occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 + P364 Take off contaminated clothing and wash it before reuse.

Other hazards: None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Components

Chemical name	CAS – No.	Concentration (% w/w)
Alcohols, C7-C21, ethoxylated	68991-48-0	>= 1 - < 5
Disodium metasilicate	6834-92-0	>= 1 - < 5

Actual concentration or concentration range is withheld as a trade secret

4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air. Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed : Causes skin irritation. Causes serious eye irritation.

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

Notes to physician : Treat symptomatically and supportively.

5. FIREFIGHTIN MEASURES

Suitable extinguishing media : Not applicable, Will not burn

Unsuitable extinguishing media: Not applicable, Will not burn

Specific hazards during fire fighting: Exposure to combustion products may be a hazard to health

Hazardous combustion products: Metal oxides, Silicon oxides, Carbon oxides

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area

Special protective equipment for fire-fighters:

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec tive equipment and emergency procedures : Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions: Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

7. HANDLING AND STORAGE

Technical measures: See Engineering measures under EXPOSURE, CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation: Use only with adequate ventilation.

Advice on safe handling: Do not get on skin or clothing. Avoid inhalation of vapor or mist. Do not swallow. Do not get in eyes. Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment. Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage: Keep in properly labeled containers. Store in accordance with the particular national regulations.

Materials to avoid: No special restrictions on storage with other products.

Storage period: 24 Months.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Dust formation may be relevant in the processing of this product. In addition to substance specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respirable particles, 10 mg/m3 - inhalable particles.
Personal protective equipment
Respiratory protection: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type: Particulates type
Hand protection
Material: Chemical-resistant gloves
Remarks: Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
Eye protection: Wear the following personal protective equipment: Safety goggles.
Skin and body protection: Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Hygiene measures: Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: clear, purple
Odor: mild
Odor Threshold: No data available
pH: 10.3 - 10.7
Melting point/freezing point: No data available
Initial boiling point and boiling range: 100 °C
Flash point: boils before flash
Evaporation rate: No data available
Flammability (solid, gas): Not applicable
Flammability (liquids): Will not burn
Upper explosion limit / Upper flammability limit: No data available
Lower explosion limit / Lower flammability limit: No data available
Vapor pressure: No data available
Relative vapor density: No data available
Relative density: No data available
Density: 1.0 - 1.01 g/cm3
Solubility(ies)
Water solubility: No data available
Partition coefficient:
n- octanol/water: Not applicable
Autoignition temperature: No data available
Decomposition temperature: No data available
Viscosity
Viscosity, kinematic: No data available
Explosive properties: Not explosive
Oxidizing properties: The substance or mixture is not classified as oxidizing.
Particle size: Not applicable

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: None known.

Conditions to avoid: None known.

Incompatible materials: Acids

Hazardous decomposition: No hazardous decomposition products are known. products

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation, Skin contact, Ingestion, Eye contact

Acute toxicity: Not classified based on available information.

Components: Alcohols, C7-C21, ethoxylated:

Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg. Method: OECD Test Guideline 401. Remarks: Based on data from similar materials.

Acute dermal toxicity: LD50 (Rat): > 2,000 mg/kg. Remarks: Based on data from similar materials

Disodium metasilicate:

Acute inhalation toxicity: LC50 (Rat): > 2 mg/l. Exposure time: 4 h. Test atmosphere: vapor. Method: OPPTS 870.1300. Remarks: Based on data from similar materials.

Acute dermal toxicity: LD50 (Rat): > 5,000 mg/kg. Method: OPPTS 870.1200. Remarks: Based on data from similar materials.

Skin corrosion/irritation

Causes skin irritation.

Components: Alcohols, C7-C21, ethoxylated:

Species: Rabbit. Result: No skin irritation. Remarks: Based on data from similar materials

Disodium metasilicate: Species: Rabbit. Method: OECD Test Guideline 404. Result: Corrosive after 3 minutes to 1 hour of exposure. Remarks: Based on data from similar materials.

Serious eye damage/eye irritation

Causes serious eye irritation.

Components: Alcohols, C7-C21, ethoxylated:

Result: Irritation to eyes, reversing within 21 days. Remarks: Based on data from similar materials.

Disodium metasilicate: Result: Irreversible effects on the eye. Remarks: Based on skin corrosivity.

Respiratory or skin sensitization

Skin sensitization: Not classified based on available information.

Respiratory sensitization: Not classified based on available information.

Components: Alcohols, C7-C21, ethoxylated:

Test Type: Maximization Test. Routes of exposure: Skin contact. Species: Guinea pig. Method: OECD Test Guideline 406. Result: negative. Remarks: Based on data from similar materials.

Disodium metasilicate: Test Type: Local lymph node assay (LLNA). Routes of exposure: Skin contact. Species: Mouse. Method: OECD Test Guideline 429. Result: negative.

Germ cell mutagenicity: Not classified based on available information.

Components: Alcohols, C7-C21, ethoxylated:

Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES). Result: negative. Remarks: Based on data from similar materials

Disodium metasilicate:

Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES). Method: OECD Test Guideline 471. Result: negative. Remarks: Based on data from similar materials. Test Type: Chromosome aberration test in vitro Method: OECD Test Guideline 473. Result: negative. Remarks: Based on data from similar materials. Test Type: In vitro mammalian cell gene mutation test. Method: OECD Test Guideline 476. Result: negative. Remarks: Based on data from similar materials.

Genotoxicity in vivo: Test Type: Mutagenicity (in vivo mammalian bone-marrow. cytogenetic test, chromosomal analysis). Species: Mouse. Application Route: Ingestion. Result: negative.

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.

Repeated dose toxicity

Components:

Disodium metasilicate: Species: Rat. NOAEL: >= 227 mg/kg. Application Route: Ingestion. Exposure time: 90 Days. Aspiration toxicity: Not classified based on available information.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components: Alcohols, C7-C21, ethoxylated

Toxicity to fish: LC50 (Scophthalmus maxim us (turbot)): 3.1 mg/l. Exposure time: 96 h. Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia sp. (Water flea)): 5.3 mg/l. Exposure time: 48 h.

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae)): 0.75 mg/l. Exposure time: 72 h. Remarks: Based on data from similar materials.

Toxicity to fish (Chronic toxi city): NOEC (Lepomis macrochirus (Bluegill sunfish)): > 0.33 mg/l. Exposure time: 30 d. Remarks: Based on data from similar materials.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC (Daphnia magna (Water flea)): 0.77 mg/l. Exposure time: 21 d. Remarks: Based on data from similar materials.

Toxicity to microorganisms: EC10 (Pseudomonas putida): > 10,000 mg/l. Exposure time: 17 h. Method: DIN 38 412 Part 8. Remarks: Based on data from similar materials.

Disodium metasilicate

Toxicity to fish: LC50 (Danio rerio (zebra fish)): 210 mg/l. Exposure time: 96 h. Method: ISO 7346/1.

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): > 100 mg/l. Exposure time: 48 h. Method: Directive 67/548/EEC, Annex V, C.2..Remarks: Based on data from similar materials.

Toxicity to algae: ErC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l. Exposure time: 72 h. Remarks: Based on data from similar materials.

Toxicity to microorganisms: EC50: > 100 mg/l. Exposure time: 3 h. Method: OECD. Test Guideline 209.

Persistence and degradability

Components: Alcohols, C7-C21, ethoxylated:

Biodegradability: Result: Readily biodegradable.Biodegradation: > 60 %. Exposure time: 28 d. Method: OECD. Test Guideline 301D.

Bioaccumulative potential: No data available

Mobility in soil: No data available

Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: Dispose of in accordance with local regulations. Contaminated packaging: Empty containers should be taken to an approved waste. Handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG: Not regulated as a dangerous good.

IATA-DGR: 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.

Domestic regulation

TDG: Not regulated as a dangerous good

15. REGULATORY INFORMATION

Volatile organic compounds (VOC) content: CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 - Guidelines for VOC in Consumer Products. VOC content: 0 % / 0 g/l.

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

DSL: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempt from listing on the Canadian Domestic Substances List (DSL).

16. OTHER INFORMATION

Full text of other abbreviations:

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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