

**SAFETY DATA SHEET****SECTION 1 - IDENTIFICATION**

**Product identifier used on the label:** ES36 Nano Substrate Densifier

**Other means of Identification:** ES36

**Recommended use of the chemical and restrictions on use:** For professional use only.

**Manufacturer/Supplier:**

Charlotte Products Ltd.

**Address:**

2060 Fisher Dr.

Peterborough, ON K9J 6X6

**Telephone:** 705-740-2880

**Fax:** 705-745-1239

**24 Hr. Emergency Tel. #:** Infotrac 1-800-535-5053 (North America), 011-1-352-323-3500 (International)

**SECTION 2 - HAZARDS IDENTIFICATION**

**Classification of the chemical:**

Eye Damage/Irritation 2B

**Label elements:**

**Signal Word:** Warning

**Hazard statement(s)**

H320 Causes eye irritation

**Precautionary statement(s)**

P264 Wash exposed areas thoroughly after handling

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P337+313 If eye irritation persists get medical advice/attention

P501 Dispose of contents/container in accordance with local regulation

**Hazard pictogram(s)**

**Other hazards not otherwise classified:** None Known

**Unknown Acute Toxicity:** 0

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name, Common Name & Synonyms:	CAS #	Concentration %
Lithium Silicate	12627-14-4	10-30

**\*\* If the chemical name/CAS # is "proprietary" and/or the weight % is shown as a range, this information had been withheld as a trade secret.**

## **SECTION 4 - FIRST-AID MEASURES**

### **Description of first aid measures:**

**If swallowed:** Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

**If on skin (or hair):** Rinse skin with water. If skin irritation occurs, get medical advice/attention. Wash contaminated clothing before reuse.

**If inhaled:** Remove the person to fresh air and keep comfortable for breathing. Call a poison center or doctor/physician if you feel unwell

**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

**Most Important symptoms and effects, both acute and delayed:** Causes eye irritation

**Indication of any immediate medical attention and special treatment needed:** Treat symptomatically

## **SECTION 5 - FIRE-FIGHTING MEASURES**

### **Extinguishing media:**

***Suitable extinguishing media:*** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

***Unsuitable extinguishing media:*** Not determined

**Special hazards arising from the substance or mixture:** No applicable information available

**Flammability classification:** Not flammable

**Hazardous combustion products:** Carbon oxides, other unidentified organic compounds.

### **Special protective equipment and precautions for firefighters:**

***Protective equipment for fire-fighters:*** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

***Special fire-fighting procedures:*** Move containers from the fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

## **SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures:** All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Keep people away from, and upwind of spilt/leak. Restrict access to the area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

**Methods and material for containment and cleaning up:** Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Do not use combustible absorbents, such as sawdust. Pick up and transfer to properly labeled containers. Contact the proper local authorities.

**Special spill response procedures:** This product when spilled or disposed of is a non-hazardous waste as defined in RCRA regulation (40 CFR 261).

## SECTION 7 – HANDLING AND STORAGE

**Precautions for safe handling:** Handle in accordance with good industrial hygiene and safety practice. Use protective equipment recommended in section 8. Avoid contact with eyes. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands, and any exposed skin thoroughly after handling.

**Conditions for safe storage:** Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Keep out of reach of children. Products may freeze if stored below 32 °F.

**Incompatible materials:** Oxidizing agents. Do not mix with other chemicals or cleaners

## SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:					
		ACGIH		OSHA	
Chemical Name	CAS #	TWA	STEL	PEL	STEL
Lithium Silicate	12627-14-4				

### Exposure controls:

**Ventilation and engineering measures:** Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Eye wash stations and shower facilities should be readily accessible in areas where the product is handled.

**Respiratory protection:** Not required with normal use. If airborne concentrations are above the permissible exposure limit or irritation occurs, use NIOSH-approved respirators. Respirators should be selected based on the form and concentration of contaminants in air, and in accordance with OSHA (29 CFR 1910.134). Advice should be sought from respiratory protection specialists.

**Skin protection:** Not required with normal use. Prolonged skin contact may require protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective regimes.

**Eye face protection:** Wear eye/face protection. Wear as appropriate tightly fitting safety goggles; Safety glasses with side-shields.

**Other protective equipment:** Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations:** Do not breathe vapors or spray mist. Avoid contact with eyes. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Straw yellow fluid

**Odor:** None

**Odor threshold:** No applicable information available

**pH:** 9-11

**Melting/Freezing point:** 32 °F

**Initial boiling point and boiling range:** 212 °F

**Flash point:** None

**Flashpoint (Method):** No applicable information available

**Evaporation rate:** Similar to water

**Flammability (solid, gas):** Not Flammable

**Lower flammable limit (% by vol.):** Not Flammable

**Upper flammable limit (% by vol.):** Not Flammable

**Vapor pressure:** Similar to water

**Vapor density:** No applicable information available

**Relative density:** ~1.185

**Solubility in water:** Soluble

**Other solubility(ies):** No applicable information available

**Partition coefficient:** No applicable information available

**Auto ignition temperature:** No applicable information available

**Decomposition temperature:** No applicable information available

**Viscosity:** Water thin

**Volatile organic Compounds (%VOC's):** 0 g/L

## SECTION 10 - STABILITY AND REACTIVITY

**Reactivity:** Not normally reactive

**Chemical stability:** Stable

**Possibility of hazardous reactions:** No hazardous polymerization

**Conditions to avoid:** Keep out of reach of Children. Do not use it in areas without adequate ventilation. Avoid contact with incompatible materials.

**Incompatible materials:** Acidic, Cationic and salt materials may gel the product.

**Hazardous decomposition products:** None known. Refer to 'Hazardous Combustion Products' in Section 5

## SECTION 11 - TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure:**

**Routes of entry - inhalation:** Avoid breathing vapors or mists

**Routes of entry – skin & eye:** Avoid contact with eyes

**Routes of entry - Ingestion:** Do not taste or swallow

**Potential Health Effects:**

**Signs and symptoms of short term (acute) exposure:**

*Symptoms:* Please see section 4 of this SDS sheet for symptoms.

**Potential Chronic Health Effects:**

**Mutagenicity:** Not expected to be mutagenic in humans.

**Carcinogenicity:** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**Reproductive effects:** This product is not expected to cause reproductive or developmental effects.

**Sensitization to material:** This product is not expected to cause skin sensitization.

**Specific target organ effects:** No applicable information available.

**Toxicological data:**

See the following table for individual ingredient acute toxicity data.

Chemical name	CAS #	LD <sub>50</sub> (Oral, rat)	LD <sub>50</sub> (Dermal Rabbit)	LC <sub>50</sub> (4hr, Inhal., rat)
Lithium Silicate	12627-14-4			

\* Estimates for the product may be based on additional component data not shown.

Other important toxicological hazards: None reported.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** No applicable information available

**Persistence and degradability:** No applicable information available

**Bioaccumulation potential:** No applicable information available.

**Mobility in soil:** No applicable information available.

**Other Adverse Environmental effects:** No applicable information available.

**SECTION 13 - DISPOSAL CONSIDERATIONS**

**Handling for disposal:** Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8.

**Methods of disposal:** Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.

**RCRA:** If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste UN defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

## SECTION 14 - TRANSPORTATION INFORMATION

**Special Shipping Information:** Keep from freezing.

**T.D.G. Classification:** Not regulated under T.D.G.

**D.O.T. Classification:** Not regulated under D.O.T.

## SECTION 15 - REGULATORY INFORMATION

### Occupational Health and Safety Regulations:

**OSHA & WHMIS:** SDS prepared pursuant to the Hazard Communication Standard (CFR 29 1910.1200) and Canadian WHMIS 2015 regulations (Controlled Products Regulations under the Hazardous Product Act).

### Environmental Regulatory Lists:

**SARA – Section 313 (Toxic Chemical Release Reporting) 40 CFR 372** – None of these ingredients are listed.

**CERCLA – Section 102 (Reportable Quantity) 40 CFR 302** – None of these ingredients are listed.

**RCRA 40 CFR 261 (SUBPART D)** – None of these ingredients are listed.

**CLEAN WATER ACT – Section 311 (Reportable Quantity) 40 CFR 116** - None of these ingredients are listed.

**CLEAN AIR ACT – Section 312 (List of Hazardous Air Pollutants) 40 CFR 63 (Subpart C)** – None of these ingredients are listed.

**National Pollutant Release Inventory** – None of the ingredients are listed.

**Toxic Substances Control Act (TSCA)** – All the ingredients are registered on the Chemical Substance Inventory.

**Canadian Domestic Substance List (DSL)** – All the ingredients are registered on the DSL.

## SECTION 16 - OTHER INFORMATION

### Legend:

**ACGIH:** American Conference of Governmental Industrial Hygienists

**CAS:** Chemical Abstract Services

**CERCLA:** Comprehensive Environmental Response, Compensation, and Liability Act of 1980

**CFR:** Code of Federal Regulations

**DOT:** Department of Transportation

**EPA:** Environmental Protection Agency

**IARC:** International Agency for Research on Cancer

**LC:** Lethal Concentration

**LD:** Lethal Dose

**NIOSH:** National Institute of Occupational Safety and Health

**NTP:** National Toxicology Program

**OSHA:** Occupational Safety and Health Administration

**PEL:** Permissible exposure limit

**RCRA:** Resource Conservation and Recovery Act

**SARA:** Superfund Amendments and Reauthorization Act

**SDS:** Safety Data Sheet

**STEL:** Short Term Exposure Limit

**TWA:** Time Weighted Average

**WHMIS:** Workplace Hazardous Materials Identification System

Information for this safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of this supplier, it is assumed that users of this material have been fully trained according to the mandatory requirements of GHS. No warranty, expressed or implied, is made and the supplier will not be liable for any losses, injuries or consequential damages which may result from the use of, or reliance on, any information contained within this form.

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