SAFETY DATA SHEET

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name: Nepheline Syenite for Abrasive Blasting

Synonyms: Anhydrous sodium potassium alumino silicate, Inorganic feldspathic mineral

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against:

Product Use: Various commercial and industrial uses

Manufacturer:

Covia (f/k/a Unimin)

CAN: 10 Four Seasons Place, Suite 600

Toronto, Ontario, M9B6H7

Emergency Telephone Number

SDS No: 013A-C-CAN

US: (203) 442-2500

Telephone Number for Information

Date Prepared: December 2018

US: (203) 442-2500

SDS Date of Preparation/Revision: December 2018

SECTION 2: HAZARDS IDENTIFICATION

GHS/ Hazcom 2012 Classification:

Physical:	Health:	Environmental
Not Hazardous	Not Hazardous	Not Hazardous

Other Hazards: A greater hazard, in most cases, is the exposure to the dust from the substrate material or paint/coatings being blasted. During this operation exposure to toxic materials such as lead, cadmium, chromium, nickel, crystalline silica, etc. found in the substrate or coatings can occur. The potential hazard from this exposure must be evaluated and appropriate protective measures taken.

GHS/Hazcom 2012 Label: Not hazardous in accordance with 29CFR 1910.1200 (Hazcom 2012) and the GHS.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CAS#	Component	Percentage
37244-96-5	Nepheline Syenite	100%

SECTION 4: FIRST AID MEASURES

Gross Inhalation: Remove victim to fresh air. If breathing has stopped, perform artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get prompt medical attention.

Skin Contact: No first aid should be needed since dermal contact with this product does not affect the skin. Wash exposed skin with soap and water before breaks and at the end of the shift.

Eye Contact: Flush the eyes immediately with large amounts of running water, lifting the upper and lower lids occasionally. If irritation persists or for imbedded foreign body, get immediate medical attention.

Ingestion: If large amounts are swallowed, get immediate medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed: May cause eye irritation with redness and tearing.

Indication of immediate medical attention and Special Treatment Needed: None required.

SECTION 5: FIREFIGHTING MEASURES

Suitable Extinguishing Media: This product will not burn but is compatible with all extinguishing media. Use any media that is appropriate for the surrounding fire.

Specific Hazards Arising from the Chemical:

Unusual Fire and Explosion Hazards: Not flammable or combustible. Dry powders may accumulate static charge in handling which can be a source of ignition for flammable atmospheres.

Hazardous Combustion Products: None.

Special Protective Equipment and Precautions for Fire-Fighters: None required with respect to this product. Firefighters should always wear self-contained breathing apparatus for fires indoors or in confined areas.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Wear appropriate protective equipment.

Environmental Precautions: Report spills and releases as required to appropriate authorities.

Methods and Material for Containment/Cleanup: If uncontaminated, collect using dustless method (HEPA vacuum or wet method) and place in appropriate container for use. If contaminated: a) use appropriate method for the nature of contamination, and b) consider possible toxic or fire hazards associated with the contaminating substances. Collect for appropriate disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: Avoid breathing dust. Respiratory protection is mandatory for abrasive blasting. A greater hazard, in most cases, is the exposure to the dust from the substrate material or paint/coatings being blasted. During this operation exposure to toxic materials such as lead, cadmium, chromium, nickel, crystalline silica, etc. found in the substrate or coatings can occur. The potential hazard from this exposure must be evaluated and appropriate protective measures taken.

Use normal precautions against bag breakage or spills of bulk material. Avoid creation of respirable dust. Use good housekeeping in storage and use areas to prevent accumulation of dust in work area.

Use adequate ventilation and dust collection. To minimize exposure, wear a respirator approved for dust when handling, storing or disposing of this product or bag. When abrasive blasting, use respiratory protection adequate for the hazard. Refer to the most recent standards of ANSI (Z88.2), OSHA (29 CFR 1910.134, 1926.103, 1910.94 and 1926.57), MSHA (30 CFR Parts 56 and 57) and NIOSH Respirator Decision Logic. Maintain, clean and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Launder clothing that has become dusty. Empty containers (bags, bulk containers, storage tanks, etc.) retain product residue and must be handled in accordance with the provisions of this Safety Data Sheet. **WARN and TRAIN** employees in accordance with state and federal regulations.

WARN YOUR EMPLOYEES (AND YOUR CUSTOMERS AND USERS IN CASE OF RESALE) BY POSTING, AND OTHER MEANS, OF THE HAZARDS AND OSHA PRECAUTIONS AND ANY OTHER APPLICABLE REGULATORY PRECAUTIONS TO BE USED. PROVIDE TRAINING FOR YOUR EMPLOYEES ABOUT OSHA PRECAUTIONS.

While nepheline syenite contains <u>no crystalline silica</u>, additional information on abrasive blasting hazards and precautionary measures can be found at the following websites:

NIOSH Joint Campaign on Silicosis Prevention http://www.cdc.gov/niosh/topics/silica/default.html
OSHA Crystalline Silica Website http://www.osha.gov/dsg/topics/silicacrystalline/index.html
MSHA Silicosis Prevention Website https://arlweb.msha.gov/S&HINFO/SILICO/SILICAX.pdf

Page 2 of 6 Date Prepared: December 2018

NIOSH Hazard Review – Health Effects of Occupational Exposure to Respirable Crystalline Silica Website http://www.cdc.gov/niosh/docs/2002-129/

Dust can accumulate electrostatic charges due to friction from transfer and mixing operations and cause an electrical spark (ignition source) which can ignite flammable liquids and atmospheres. Provide adequate precautions when adding this product to flammable and combustible mixtures like paints and coating, such as electrical grounding and bonding, inert atmosphere or non-sparking tools. However, bonding and grounds may not eliminate the hazard for static accumulation.

Conditions for Safe Storage, Including any Incompatibilities: Store in a dry location.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

Definitions:

NIOSH means National Institute for Occupational Safety and Health.

REL means the NIOSH Recommended Exposure Limit.

TLV means American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value.

TWA means time-weighted average.

Ontario $OEL - 10 \text{ mg/ m}^3 \text{ (total dust)}$

PEL - 5 mg/m 3 TWA (respirable fraction), 15 mg/m 3 TWA (total dust) as Particulates not Otherwise Regulated TLV- None established (refer to ACGIH guidance for Particulates (insoluble or poorly soluble) Not Otherwise Specified) MSHA – 10 mg/m 3 TWA as Nuisance Particulates

Appropriate Engineering Controls: Use local exhaust as required to maintain exposures below applicable occupational exposure limits. Refer to OSHA 29 CFR 1910.94 and 1926.57 for requirements for abrasive blasting. See also ACGIH "Industrial Ventilation - A Manual for Recommended Practice" (current edition). Control of exposure to dust must be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general or local exhaust ventilation and substitution of less toxic materials).

Personal Protective Equipment:

Respiratory Protection: Respiratory protection is mandatory. NIOSH states that positive pressure Type CE supplied air abrasive-blast respirators (SARs) are the only respirators suitable for use in abrasive blasting operations, and a pressure demand respirator containing a tight fitting face-piece with a protection factor of 2000 is required. NIOSH recommends that continuous flow Type CE abrasive blast SARs be operated near the upper limit of the NIOSH approved operating pressure range to ensure maximum protection to the user. Use appropriate respiratory protection for respirable particulates based on consideration of hazardous materials present, airborne workplace concentrations and duration of exposure arising from intended end use. Refer to the most recent standards of ANSI (Z88.2), OSHA (29 CFR 1910.134, 1926.103, 1910.94 and 1926.57), MSHA (30 CFR Parts 56 and 57) and NIOSH Respirator Decision Logic.

Gloves: Protective gloves recommended.

Eye Protection: Safety glasses or goggles recommended.

Other Protective Equipment/Clothing: As appropriate for the work environment. Dusty clothing should be laundered before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid	Appearance:	White powder
Viscosity:	Not applicable	Odor:	None
pH:	Not applicable	Odor Threshold:	Not applicable
Boiling Point/Range:	Not applicable	Vapor Density:	Not applicable
Melting point/freezing	1223°C / 2233°F	Evaporation Rate:	Not applicable

Page 3 of 6 Date Prepared: December 2018

point:			
Flammability (solid, gas):	Fully oxidized, will not burn	Partition coefficient (n-	Not applicable
		octanol/water):	
Decomposition	Not applicable	Vapor Pressure:	Not applicable
Temperature:		_	
Flash Point:	Not applicable	Relative Density:	2.61
Lower Explosion Limit:	Not applicable	Solubilities:	Insoluble in water
Upper Explosion Limit:	Not applicable	Autoignition Temperature:	Will not burn

SECTION 10: STABILITY AND REACTIVITY

Reactivity: This product is not reactive under normal conditions of storage and use.

Chemical Stability: This product is stable at normal temperatures.

Possibility of Hazardous Reactions: None known

Conditions to Avoid: None known.

Incompatible Materials: None known

Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Potential Health Effects:

Inhalation: Inhalation of dust may cause irritation of the nose, throat and respiratory passages.

Skin Contact: No adverse effects expected.

Eye Contact: Contact may cause mechanical irritation and possible injury.

Ingestion: No adverse effects expected for normal, incidental ingestion.

Chronic Health Effects: Prolonged overexposure to any nuisance dust may cause lung injury. Symptoms include cough, shortness of breath, and reduced pulmonary function.

Signs and Symptoms of Exposure: Overexposure to nuisance dusts may cause mucous membrane and respiratory irritation, cough, sore throat, nasal congestion, sneezing and shortness of breath.

Acute Toxicity Values: No acute toxicity data is available for product.

Skin Sensitization: Not a skin sensitizer in animals or humans.

Repeated Dose Toxicity: No specific data is available, however, prolonged overexposure to nuisance dust may cause lung changes.

Carcinogenicity: None of the components of this product are listed as carcinogens or suspected carcinogens by IARC, NTP or OSHA.

Developmental / **Reproductive Toxicity**: No specific data is available, however, there is no evidence that nepheline syenite exposure has any effect on reproduction.

Page 4 of 6 Date Prepared: December 2018

Genetic Toxicity: No specific data is available, however, there is no evidence that nepheline syenite is a germ cell mutagen.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity: No ecotoxicity data is available. This product is not expected to present an environmental hazard.

Persistence and Degradability: This product is not degradable but not hazardous to the environment.

Bioaccumulative Potential: Not expected to bioaccumulate.

Mobility in Soil: Not applicable.

Results of PBT and vPvB Assessment: None required.

Other Adverse Effects: None known

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods:

Nepheline Syenite is not classified as a hazardous waste under US EPA RCRA regulations. If uncontaminated, dispose as an inert, non-metallic mineral. If contaminated, dispose in accordance with all applicable local, state/provincial and national/federal regulations in light of the contamination present. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

SECTION 14: TRANSPORT INFORMATION

Not regulated for transportation under IATA/ICAO, IMDG, US DOT, EU ADR, or Canadian TDG Regulations. Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code: None

SECTION 15: REGULATORY INFORMATION

SARA 311/312: Refer to Section 2 for the OSHA Hazard Classification

SARA 313 This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under the SARA Section 313 (40 CFR 372): None

CERCLA Section 103 Reportable Quantity: None

California Proposition 65: This product does not contain substances regulated under California Proposition 65.

Toxic Substances Control Act: All of the components of this product are listed on the EPA TSCA Inventory or exempt from premanufacture notification requirements.

European Inventory of Commercial Chemical Substances: All of the components of this product are listed on the EINECS Inventory or exempt from notification requirements.

EU REACH Status: This substance is exempt from REACH registration.

Canadian Environmental Protection Act: All the components of this product are listed on the Canadian Domestic Substances List or exempt from notification requirements.

Canadian WHMIS Classification: Not a controlled product

Page 5 of 6 Date Prepared: December 2018

This SDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the SDS contains all of the information required by the CPR.

Japan METI: All of the components of this product are existing chemical substances as defined in the Chemical Substance Control Law.

Australian Inventory of Chemical Substances: All of the components of this product are listed on the AICS inventory or exempt from notification requirements.

Australian National Occupational Health & Safety Commission Status: Not classified as hazardous according to the criteria of Australian National Occupational Health & Safety Commission.

Korea: All of the components of this product are listed on the ECL inventory or exempt from notification requirements.

Philippines: All of the components of this product are listed on the PICCS inventory or exempt from notification requirements.

New Zealand: All of the components of this product are listed on the HSNO inventory or exempt from notification requirements.

China: All of the components of this product are listed on the IECSC inventory or exempt from notification requirements.

Taiwan: All of the components of this product are listed on the CSNN inventory or exempt from notification requirements.

16: OTHER INFORMATION

NFPA Hazard Rating: Health: 0 Fire: 0 Reactivity: 0

HMIS Hazard Rating: Health: 0 Fire: 0 Reactivity: 0

References:

Registry for Toxic Effects of Chemical Substances (RTECS), 2018

Patty's Industrial Hygiene and Toxicology

NIOSH Hazard Review - Health Effects of Occupational Exposure to Respirable Crystalline Silica, April 2002

NTP Report on Carcinogens

Hazardous Substances Data Bank (HSDB), 2014

Toxline: 2014

SDS Date of Preparation/Revision: December 2018

Revision Summary: Update Manufacturer Name, Address, Phone Number, SDS No., File Name

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. The information set forth herein is based on technical data Covia believes reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside the control of Covia, no warranties, expressed or implied, are made and no liability is assumed in connection with any use of this information. Any use of these data and information must be determined by the user to be in accordance with federal, state and local laws and regulations.

Page 6 of 6 Date Prepared: December 2018