

# POTASSIUM SILICATE CONCENTRATE

# 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE & OF THE COMPANY/UNDERTAKING

### 1.1 | **PRODUCT IDENTIFIER**

CODE PRODUCT NAME

None Potassium Silicate Concentrate

### 1.2 | RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE & USES ADVISED AGAINST

INTENDED USE

Silicate Modified Wall Sealant

# 1.3 | DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

NAME FULL ADDRESS DISTRICT & COUNTRY ROMA – Eco-Sustainable Building Technologies 554 North Avenue NW, Suite B Atlanta, GA 30318 | United States of America (USA) 678-905-3700

# 1.4 | EMERGENCY TELEPHONE NUMBER

FOR URGENT INQUIRIES REFER TO

Call 911 if you have a poison emergency. Call the CDC if swallowed but person is alert 1-800-222-1222

# 2 | HAZARDS IDENTIFICATION

# 2.1 | CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/ EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

DANGER SYMBOLS Xi

R PHRASES

36/38

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

# 2.2 | LABEL ELEMENTS

Hazard labeling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.

R36/38	Irritating To Eyes And Skin.
S2	Keep Out Of The Reach Of Children.
S35	Avoid Contact With Eyes.
S36	In Case Of Contact With Eyes, Rinse Immediately With Plenty Of Water And Seek Medical Advice.



**\$37** Wear Suitable Gloves.

**\$46** If Swallowed, Seek Medical Advice Immediately And Show This Container Or Label.



# 2.3 | OTHER HAZARDS

Information not available.

# **3** | COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 | SUBSTANCES

Information not relevant.

### 3.2 | MIXTURES

IDENTIF	ICATION	CONC. %	CLASSIFICATION 67/548/EEC	CLASSIFICATION 1272/2008 (CLP)
ZINC P	YRITHIONE			
CAS	1312-76-1	60 - 62	Xi R36/38	Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC	215-199-1			
INDEX	-			

Reg. no. 01-2119456888-17

T+ = Very Toxic (T+), T = Toxic(T), Xn = Harmful (Xn), C = Corrosive (C), Xi = Irritant (Xi), O = Oxidizing (O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment (N)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

# 4 | FIRST AID MEASURES

# 4.1 | DESCRIPTION OF FIRST AID MEASURES

EYES	Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.
SKIN	Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.
INHALATION	Remove to open air. If respiration is difficult, administer artificial respiration and seek medical advice.
INGESTION	Seek medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

# 4.2 | MOST IMPORTANT SYMPTOMS & EFFECTS, BOTH ACUTE & DELAYED

For symptoms and effects caused by the contained substances see Chap. 11.



# 4.3 | INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION & SPECIAL TREATMENT NEEDED

Follow doctor's orders.

# 5 | FIREFIGHTING MEASURES

### 5.1 | EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA

The extinction equipment should be of the conventional kind: Carbon Dioxide, Foam, Powder and Nebulized Water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS None in particular.

### 5.2 | SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (Carbon Oxide, Toxic Pyrolysis Products, etc.).

#### 5.3 | ADVICE FOR FIREFIGHTERS

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and antistatic), a depressurized mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

# 6 | ACCIDENTAL RELEASE MEASURES

# 6.1 | PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. If there are no contraindications, spray solid products with water to prevent the formation of dust. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet. These indications apply for both processing staff and those involved in emergency procedures.



### 6.2 | ENVIRONMENTAL PRECAUTIONS

The product must not penetrate the sewers, surface water, ground water and neighboring areas.

### 6.3 | METHODS & MATERIAL FOR CONTAINMENT & CLEANING UP

Use inert absorbent material (sand, vermiculite, diatomeous earth, Kieselguhr, etc.) to soak up leaked product. Collect the majority of the remaining material and deposit it in containers for disposal. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4 | **REFERENCE TO OTHER SECTIONS**

Any information on personal protection and disposal is given in sections 8 and 13.

# 7 | HANDLING & STORAGE

#### 7.1 | PRECAUTIONS FOR SAFE HANDLING

Do not smoke while handling and use.

#### 7.2 | CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in a well-ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

#### 7.3 | SPECIFIC END USE(S)

Information not available.

# 8 | EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 | CONTROL PARAMETERS

N/A

#### 8.2 | EXPOSURE CONTROLS

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Personal protection equipment must comply with the rules in force indicated below.

#### HANDLING PROTECTION

Protect hands with category II (Ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitryl or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

#### EYE PROTECTION

Wear protective airtight goggles (Ref. Standard EN 166).



#### SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

#### RESPIRATORY PROTECTION

If the threshold value (if available) for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an B or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (Ref. Standard EN 141).

The use of respiratory tract protection equipment, such as masks like that indicated above, is necessary to reduce worker exposure in the absence of technical measures. The protection provided by masks is in any case limited.

If the substance in question is odorless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (Ref. Standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (Ref. Standard EN 138).

# 9 | PHYSICAL & CHEMICAL PROPERTIES

### 9.1 | INFORMATION ON BASIC PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE	Liquid
COLOR	White
ODOR	Characteristic
ODOR THRESHOLD	_
PH.	12 – 13
MELTING OR FREEZING POINT	_
BOILING POINT	-
DISTILLATION RANGE	-
FLASH POINT	> 61°C
EVAPORATION RATE	-
FLAMMABILITY OF SOLIDS & GASES	-
LOWER INFLAMMABILITY LIMIT	-
UPPER INFLAMMABILITY LIMIT	-
LOWER EXPLOSIVE LIMIT	-
UPPER EXPLOSIVE LIMIT	-
VAPOR PRESSURE	-
VAPOR DENSITY	-
SPECIFIC GRAVITY	1,000 Kg/lt
SOLUBILITY	Water
PARTITION COEFFICIENT: N-OCTANOL/WATER	-
IGNITION TEMPERATURE	-
DECOMPOSITION TEMPERATURE	-
VISCOSITY	-
REACTIVE PROPERTIES	-



### 9.2 | OTHER INFORMATION

VOC (DIRECTIVE 2004/42/EC)

0.00 g/l

Matt coatings for interior walls and ceilings. EU limit value for this product (cat. A / a): 50 g/lt (2007) / 30 g/lt (2010).

# 10 | STABILITY & REACTIVITY

# 10.1 | REACTIVITY

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2 | CHEMICAL STABILITY

The product is stable in normal conditions of use and storage.

# 10.3 | POSSIBILITY OF HAZARDOUS REACTIONS

No hazardous reactions are foreseeable in normal conditions of use and storage.

### 10.4 | CONDITIONS TO AVOID

None in particular, however the usual precautions used for chemical products should be respected.

### 10.5 | INCOMPATIBLE MATERIALS

Information not available.

# 10.6 | HAZARDOUS DECOMPOSITION PRODUCTS

In the event of thermal decomposition or fire, vapors potentially dangerous to health may be released.

# 11 | TOXICOLOGICAL INFORMATION

# 11.1 | INFORMATION ON TOXICOLOGICAL EFFECTS

Acute effects: stinging eyes. Symptoms may include: pubescence, edema, pain and lachrymation. Contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapor inhalation may slightly irritate the upper respiratory tract. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

#### CALCIUM CARBONATE

LD50 (Oral)

6450 mg/kg Rat

**TITANIUM DIOXIDE** LD50 (Oral)

> 10000 mg/kg Rat



# 12 | ECOLOGICAL INFORMATION

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil, sewers and waterways. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

### 12.1 | **TOXICITY**

Information not available.

#### 12.2 | PERSISTENCE & DEGRADABILITY

Information not available.

#### 12.3 | BIOACCUMULATIVE POTENTIAL

Information not available.

#### 12.4 | MOBILITY IN SOIL

Information not available.

#### 12.5 | RESULTS OF PBT & vPvB ASSESSMENT

Information not available.

#### 12.6 | OTHER ADVERSE EFFECTS

Information not available.

# 13 | DISPOSAL CONSIDERATIONS

#### 13.1 | WASTE TREATMENT METHODS

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorized waste management firm, in compliance with national and local regulations.

#### CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

# 14 | TRANSPORT INFORMATION

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.



# 15 | **REGULATORY INFORMATION**

# 15.1 | SAFETY, HEALTH & ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE

SEVESO CATEGORY

None

RESTRICTIONS RELATING TO THE PRODUCT OR CONTAINED SUBSTANCES PURSUANT TO ANNEX XVII TO EC REGULATION 1907/2006.

3

SUBSTANCES IN CANDIDATE LIST (ART. 59 REACH) None

SUBSTANCES SUBJECT TO AUTHORIZATION (ANNEX XIV REACH) None

HEALTHCARE CONTROLS

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

# 15.2 | CHEMICAL SAFETY ASSESSMENT

No chemical safety assessment has been processed for the mixture and the substances it contains.

# 16 | OTHER INFORMATION

TEXT OF HAZARD (H) INDICATIONS MENTIONED IN SECTION 2-3 OF THE SHEET

EYE IRRIT. 2	Skin Irritation, Category 2
SKIN IRRIT. 2	Skin Irritation, Category 2
H319	Causes serious eye irritation.
H315	Causes skin irritation.

TEXT OF RISK (R) PHRASES MENTIONED IN SECTION 2-3 OF THE SHEET

#### R36/38

Irritating to Eyes and Skin.

#### GENERAL BIBLIOGRAPHY

- 1. Directive 1999/45/EC and following amendments
- 2. Directive 67/548/EEC and following amendments and adjustments
- 3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament
- 7. The Merck Index. 10th Edition
- 8. Handling Chemical Safety
- 9. Niosh Registry of Toxic Effects of Chemical Substances



- 10. INRS Fiche Toxicology (toxicological sheet)
- 11. Patty Industrial Hygiene and Toxicology

12. N.I. Sax – Dangerous properties of Industrial Materials-7, 1989 Edition

#### NOTE FOR USERS

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.