MSDS

In compliance with NBR 14725

1) PRODUCT AND COMPANY IDENTIFICATION

Commercial name: MOSHE 3000 REPEL
Product Usage: Ready-to-use aqueous solution, used for the hydrophobic impregnation of mineral building materials to make them water-repellent.
Company name: MOSHE 3000 MATERIAIS DE CONSTRUÇÃO LTDA

Address: Rua Zélia, 454 Bairro Assunção São Bernardo do Campo / SP - Brazil
Contact phone: +55 11 97673 1458
Email: comercial@moshe3000.com

2) HAZARD IDENTIFICATION

GHS rating
Corrosive to the skin: Category 1
Serious eye injuries: Category 1

GHS labeling elements

Pictograms:

Warning word:
Danger

Danger Phrases:
Causes severe skin burns and eye damage.

Precautionary phrases:

Prevention:
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Other hazards that do not result in classification
Not known.

3) COMPOSITION AND INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Chemical nature: Silicone resin solution
CAS number: 31795-24-1
wt >= 30 - < 50
Chemical Name: Potassium methyl siliconate

4) FIRST AID

4.1 Description of first aid measures

General indications:	Consult a doctor in case of an accident or feeling unwell (show the label where possible).
In case of skin contact:	Wash with plenty of soap and water. In case of skin changes or obvious discomfort, seek medical advice (if possible, show the label or safety data sheet of the product to the doctor).
In case of eye contact:	Wash off immediately with plenty of water. Remove contact lenses. Keep eyes wide open while rinsing. In case of prolonged irritation, consult a doctor.
In case of inhalation:	Provide fresh air.
In case of ingestion:	Rinse mouth with water and drink plenty of water afterward. Do not give milk or alcoholic beverages. Do not induce vomiting. Never give anything by mouth to an unconscious person.
4.2 Most important symptoms and effects, both acute and delayed:	It causes burns in the digestive system. Causes serious eye damage. Causes severe burns.
4.3 Indications of urgent medical care and special treatment needed:	First aid responders should pay attention to their own protection and use recommended personal protective equipment when there is a risk of exposure.

5) FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:	Not applicable. Does not combust.
Extinguishing media that must not be used for safety reasons:	Not applicable. Does not combust.

5.2 Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture:	In case of fire in the surroundings, dangerous vapors may be generated. Exposure to

	combustion products can be a health hazard! Hazardous Combustion Products: Carbon Oxide, Silicon Oxide, Metal Oxides, Formaldehyde.

5.3 Advice for firefighters

Special protective equipment for firefighting:	Use a breathing apparatus that is independent of the ambient air. Keep unprotected persons away.
General indications:	Use measures appropriate to the fire source.

6) SPILL OR LEAK CONTROL MEASURES

6.1 Personal precautions, protective and protective equipment, and emergency procedures	Isolate the area. Wear personal protective equipment (see item 8). Keep unprotected persons away. If material is spilled, indicate a slipping hazard. Do not pass through spilled material.
6.2 Environmental precautions	Do not let it reach water, sewage, and soil. Stop the escape if you can do it without danger. Contain spilled liquid with appropriate material (e.g., earth). Retain polluted water/water from extinguishing fires. Removal in designated and marked containers. If spilled into watercourses, into the sewer system, or onto the ground, inform the competent authorities.
6.3 Methods and materials for containment and cleaning	Pick up mechanically and dispose of following local regulations. Do not wash with water. In the case of small amounts: Collect and dispose of them according to regulations using neutral (non-alkaline / non-acidic) liquid-binding materials, such as infusirium earth. For large quantities: Liquids can be recovered using suction instruments or pumps. If flammable, use only properly rated pneumatic or electrical equipment. Remove any residual sediments that come off with soap or another biodegradable cleaning product. Silicone fluids are slippery; leaks are a safety hazard, apply sand or other inert granulated material to improve traction.

7) HANDLING AND STORAGE

7.1 Precautions for safe handling

General information:	Stir well before using.

Precautions for safe handling:	Provide good ventilation.
Recommendations for safe handling:	Do not allow contact with skin or clothing. Do not breathe vapors or spray. Do not ingest. Avoid eye contact. Handle following good industrial hygiene and safety practices based on the results of the workplace exposure assessment. Keep the container tightly closed. Take care to prevent spills, and waste and minimize release to the environment.
7.2 Conditions for safe storage, including any incompatibilities	
Requirements for warehouses and containers:	Store in properly labeled containers.
Additional information regarding storage conditions:	Store in a locked place. Keep tightly closed. Store following the particular national regulations
7.3 Specific end uses	No information available.

8) EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1 Control parameters

Components with parameters to be controlled at the workplace:	It does not contain substances with occupational exposure limit values.

8.2 Exposure control

Limited and controlled workplace exposure

General measures of protection and hygiene:	Observe standard industrial hygiene practices in handling chemicals. Do not breathe gases/vapors/ aerosols. Use with adequate ventilation. Do not eat or drink or smoke while handling. Ensure that eyewash systems and safety showers are located close to the work site.
Supplementary notes on configuration and technical measures	
Individual protection equipment:	Observe the information in point 7. Observe national regulations and statutes.
Breath protection	If it is not possible to exclude the possibility of inhalation exposure above the limit value in the workplace, it is necessary to use suitable respiratory protective equipment. Suitable respiratory equipment: Respiratory protective equipment with full

mask, in compliance with established standards, such as EN 136.
Recommended Filter Type: ABEK gas filter (certain inorganic, organic and acidic gases and vapours; ammonia/amines), conforming to established standards such as EN 14387.
In case of exposure to mist, spray or aerosol, suitable respiratory protective equipment and protection factor must be used. Suitable respiratory equipment: Respiratory protective equipment with full mask, in compliance with established standards, such as EN 136.
Recommended Filter Type: ABEK-P2 combination filter (certain inorganic, organic and acidic gases and vapours; ammonia/amines; particulates), in compliance with established standards such as EN 14387.
The time limit for using respiratory protection and information from the equipment manufacturer must be observed.

eye protection

Recommendation: Wear chemical-resistant protective goggles. If splashing is likely to occur, wear: Face shield.

hand protection

It is recommended the use of protective gloves for handling the product, such as the EN374 standard.

Recommended glove material: Protective nitrile gloves
Material thickness: > 0.1 mm
Drilling time with certain chemical substances: > 480 min

Recommended glove material: Protective butyl rubber gloves
Material thickness: > 0.3mm
Drilling time with certain chemical substances: > 480 min

Please observe the instructions regarding permeability and breakthrough time that are provided by the supplier of the gloves. Also take into account the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and contact time. It should be noted that, in daily use, the durability of chemical protective gloves can be much shorter than the permeation time found in tests due to many influencing factors (e.g., temperature).

skin protection	Select appropriate protective clothing based on chemical resistance data and an assessment of local exposure potential. Skin contact should be avoided by wearing impermeable protective clothing (gloves, aprons, boots, etc.).
Limited and controlled exposure to the environment	
Recommendation	Do not let it reach water, sewage, and soil.

9) PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Feature:	**Value:**	**Method:**
Aspect		
physical state:	liquid	
Form:	aqueous	
Color:	clear	
Odor		
Odor:	Characteristic	
odor threshold		
Odor Threshold:	data not available	
pH value		
pH value:	13-14	
Melting point/freezing point		
Melting Point/Freezing Point:	data not available	
Initial boiling point and boiling range		
Initial boiling point and boiling temperature range:	100°C	
flash point		
Flashpoint:	>100ºC	closed vessel
Evaporation rate		
Evaporation rate:	data not available	
Upper/lower flammability or explosive limit		
Flammability:	Not applicable	
Minimum explosion limit value:	not available	
Maximum explosion limit value:	not available	
Steam pressure		

Steam pressure:	not available	
vapor density		
Relative density of the gas/vapor:	unknown data	
Relative density		
Relative density:	1.04g/cm³	(Not specified)
Relative vapor density:	not available	
Solubility		
Solubility in water:	Yes	
Partition coefficient (n - octanol/water)		
Partition coefficient (n - octanol /water):	data not available	
Autoignition temperature		
Autoignition temperature:	The substance or mixture is not classified as pyrophoric. The substance or mixture is not classified as self-heating.	
Decomposition temperature		
Thermal decomposition:	data not available	
Viscosity		
Kinematic viscosity):	10 cSt at 25°C	(Not specified)
Molecular mass		
Molecular mass:	not available	

9.2 Other information

risk of explosion	not explosive

10) STABILITY AND REACTIVITY

Reactivity	Not classified as a reactivity hazard.
chemical stability	Stable under normal conditions
Possibility of hazardous reactions	Use at high temperatures can form highly harmful compounds. May react with strong oxidizing agents. Hazardous decomposition products will be formed at elevated temperatures.
Incompatible materials:	acid oxidants Hazardous decomposition products

Thermal decomposition:	Formaldehyde
Conditions to avoid	Not known.

11) TOXICOLOGICAL INFORMATION

Information on possible routes of exposure:
Inhalation

skin contact

ingestion

eye contact

acute toxicity
Not classified based on available information.

Product:
Acute oral toxicity:
Acute toxicity estimate: > 5,000
mg/kg Method: Calculation
method

Acute toxicity - Inhalation:
Acute toxicity estimate: > 40 mg/l Exposure time: 4 h
Test atmosphere: vapor Method: Calculation method

Acute toxicity - Dermal:
Acute toxicity estimate: > 5,000 mg/kg Method: Calculation method

Components:
Methylsilanetriolate:

Acute oral toxicity:
LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture does not exhibit acute oral toxicity Remarks: On basis of test data.

Skin corrosion/irritation.
Causes severe burns.

Components:
Methylsilanetriolate:

Result: Corrosive after 3 minutes or fewer exposure Remarks: Information taken from reference works and literature.

Serious eye damage/ eye irritation Causes
serious eye damage.

Components:
Methylsilanetriolate:

Result: Irreversible effects on the eyes

Remarks: Technical advice Respiratory or skin sensitization

Skin sensitization.
Not classified based on available information. Respiratory sensitization is not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Components:

Methylsilanetriolate:

In vitro genotoxicity:

Test Types: Bacterial Reverse Mutation Test (AMES) Result: negative
Remarks: Based on test data.

Genotoxicity in vivo:

Test Types: Mammalian erythrocyte micronucleus test (in vivo cytogenetic test) Species: Mouse

Route of application: Ingestion

Result: negative

Remarks: Based on data from similar materials

Germ cell mutagenicity
Evaluation:
Animal tests have not shown mutagenic effects.

Carcinogenicity
Not classified based on available information. Reproductive toxicity is not classified based on available information.

Components:

Methylsilanetriolate:

Effects on fertility:

Types of Tests: Repeated dose toxicity study combined with developmental/reproduction toxicity screening test

Species: Rat, male and female

Route of application: Ingestion

Symptoms: No effects on fertility.

Remarks: Based on data from similar materials

Effects on the developing fetus:

Types of Tests: Repeated dose toxicity study combined with developmental/reproduction toxicity screening test

Species: Rat, male and female

Route of application: Ingestion

Symptoms: No effects on fetal development.
Remarks: Based on data from similar materials

Reproductive toxicity:

No evidence of adverse effects on sexual function and fertility or development, based on animal experiments.

Specific target organ toxicity - single exposure

Not classified based on available information.

Specific target organ toxicity - repeated exposure

Not classified based on available information.

Components:
Methylsilanetriolate: Routes of
Exposure: Ingestion

Assessment: No significant health effects were observed in animals at concentrations of 100 mg/kg bw or less.

Routes of Exposure: Inhalation (vapor)

Assessment: No significant health effects were observed in animals at concentrations of 1 mg/l/6h/d or less.

Repeated dose toxicity Components:
Methylsilanetriolate:

Species: Mouse

Route of application: Ingestion

Remarks: Based on data from similar materials

Species: Mouse

Route of application: inhalation (steam)

Remarks: Based on data from similar materials

aspiration hazard

Not classified based on available information.

12) ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Methylsilanetriolate:

Toxicity to microorganisms:

EC50: > 100 mg/l

Method: OECD 209 Test Guideline

Persistence and degradability

data not available

Bioaccumulative potential

Components:

Methylsilanetriolate:

Partition coefficient (n - octanol /water): log Pow: -2.36

soil mobility

data not available

Other adverse effects

data not available

13) FINAL DESTINATION CONSIDERATIONS

Waste disposal methods:
Dispose of it following the local responsible authority.

Contaminated packaging:
Empty containers must be taken to an approved solid waste handling site for recycling or disposal. If not otherwise specified: Discard as unused product.

14) TRANSPORT INFORMATION

national regulation

ANTT
NUMBER: 1719

RISK CLASS: 8

NUMBER: 80

PACKING GROUP: II

SHIPPING NAME: CAUSTIC ALKALINE LIQUID, NE (Potassium methylsilanetriolate)

UNRTDG
UN number: UN 1719

Proper shipping name: CAUSTIC ALKALI LIQUID, NOS (Potassium methylsilanetriolate) Risk class: 8

Packing group: II

Labels: 8

IATA-DGR
UN/ID No.: UN 1719

Proper shipping name: Caustic alkali liquid, us. (Potassium methylsilanetriolate) Risk class: 8

Packing group: II

Labels: corrosive

Packing instructions (cargo aircraft): 855

Packing instructions (passenger aircraft): 851

Code-IMDG
Labels: 8
EmS code: FA, SB
Marine pollutant: no

Mass transport following Annex II of MARPOL 73/78 and the IBC Code does not apply to the product as supplied.

15) REGULATORY INFORMATION

Federal Decree n. 2657 of July 3, 1998
Law n. 12,305 of August 2, 2010
Decree n. 7404 of December 23, 2010
Ordinance n. 229 of May 24, 2011, Amends Regulatory Standard n. 26
Standard ABNT NBR 14725-4 2014
The product does not harm nature, and using the PPE mentioned above will not cause health problems.

16) OTHER INFORMATION

UN number: UN 1719
Proper shipping name: CAUSTIC ALKALI LIQUID, NOS (Potassium methylsilanetriolate)
Risk class: 8
Packing group: II

This MSDS was prepared based on current knowledge about the proper handling of the product and under normal conditions of use, according to the application specified on the packaging. Any other form of use of the product that involves its combination with other materials, in addition to forms of use other than those indicated, are the responsibility of the user. It is warned that the handling of any chemical substance requires prior knowledge of its dangers by the user. In the

workplace, it is up to the company to use the product to promote the training of its employees regarding the possible risks arising from exposure to the chemical product.