Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : REFSAN CERAMIC POWDER

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Industrial use

Industrial/Professional use spec : Ceramic Raw Material

Industrial

For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

REF-SAN İZOLASYON SAN. TİC. LTD. ŞTİ.

İnköy Mah. Perli Yolu Cad. No:19 Merkez/KÜTAHYA/

TURKIYE

internet@refsan.com.tr - www.refsan.com.tr

1.4. Emergency telephone number

Emergency number : +90 (850) 225 02 74

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Contains : quicklime; sodium peroxide
Hazard statements (CLP) : H315 - Causes skin irritation.

H318 - Causes serious eye damage.

Safety Data Sheet

according to Regulation (EU) 2015/830

Precautionary statements (CLP)

: P264 - Wash hands, forearms and face thoroughly after handling.

P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

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. P310 - Immediately call a POISON CENTER or doctor.

P321 - Specific treatment (see supplemental first aid instruction on this label).

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
silicon dioxide, amorphous	(CAS-No.) 7631-86-9 (EC-No.) 231-545-4	55.77	Not classified
ALUMINA	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	17.81	Not classified
quicklime	(CAS-No.) 1305-78-8 (EC-No.) 215-138-9	8.08	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
Magnesium oxide (MgO)	(CAS-No.) 1309-48-4 (EC-No.) 215-171-9	2.11	Not classified
sodium peroxide	(CAS-No.) 1313-60-6 (EC-No.) 215-209-4 (EC Index-No.) 011-003-00-1	1.45	Ox. Sol. 1, H271 Skin Corr. 1A, H314
Potassium oxide (K2O)	(CAS-No.) 12136-45-7 (EC-No.) 235-227-6	0.67	Not classified
Titanium Dioxide	(CAS-No.) 13463-67-7 (EC-No.) 236-675-5	0.63	Not classified
Diiron trioxide	(CAS-No.) 1309-37-1 (EC-No.) 215-168-2	0.49	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

: Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact

: Wash skin with plenty of water. Wash with plenty of water/.... Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label).

First-aid measures after eye contact

: Rinse eyes with water as a precaution. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Safety Data Sheet

according to Regulation (EU) 2015/830

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any

chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing. Do not enter fire area without proper

protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper

protection.

Emergency procedures : Ventilate area

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. On land, sweep or shovel into suitable containers.

Minimise generation of dust. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13. See Heading 8. Exposure controls and personal protection.

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash

hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of

vapour.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Keep only in the original container in a cool, well

ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Protective gloves. Wear protective gloves.

Eye protection:

Safety glasses. Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment. Wear appropriate mask

Personal protective equipment symbol(s):





Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

Safety Data Sheet

according to Regulation (EU) 2015/830

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

: Solid Physical state Powder. Appearance Colour Beige. Odour characteristic. Odour threshold No data available рΗ : No data available Relative evaporation rate (butylacetate=1) : No data available Melting point : No data available Freezing point : Not applicable : No data available Boiling point Flash point : Not applicable Auto-ignition temperature : Not applicable Decomposition temperature : No data available Flammability (solid, gas) : Non flammable. Vapour pressure : No data available : No data available Relative vapour density at 20 °C : No data available Relative density Solubility : No data available Partition coefficient n-octanol/water (Log Pow) : No data available Viscosity, kinematic : No data available Viscosity, dynamic : No data available Explosive properties No data available Oxidising properties No data available **Explosion limits** : Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified

Safety Data Sheet

according to Regulation (EU) 2015/830

Acute toxicity (inhalation) : Not classified

silicon dioxide, amorphous (7631-86-9)	
LD50 oral rat	> 10000 mg/kg (Rat, Oral)
LD50 dermal rabbit	> 5000 mg/kg (Rabbit, Dermal)

Titanium Dioxide (13463-67-7)	
	> 5000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)

quicklime (1305-78-8)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:US Federal Register 38: 187, Part 1500, Section 41, 1973.

Magnesium oxide (MgO) (1309-48-4)	
LD50 oral rat	3870 mg/kg

Skin corrosion/irritation : Causes skin irritation.
Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

ALUMINA (1344-28-1)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

ALUMINA (1344-28-1)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

quicklime (1305-78-8)	
LOAEL (oral, rat, 90 days)	300 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.413 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

Safety Data Sheet

according to Regulation (EU) 2015/830

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and

symptoms

: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

 $\label{prop:large_equation} \mbox{Hazardous to the aquatic environment, short-term}$

(acute)

: Not classified

Hazardous to the aquatic environment, long-term $% \label{eq:control} % \label{eq:control}$

(chronic)

: Not classified

silicon dioxide, amorphous (7631-86-9)

LC50 fish 1 > 10000 mg/l (96 h, Brachydanio rerio, Literature)

EC50 Daphnia 1 > 10000 mg/l (24 h, Daphnia magna, Literature)

EC50 72h algae (1) 440 mg/l (Selenastrum capricornutum, Literature, Growth rate)

ALUMINA (1344-28-1)

EC50 72h algae (1)

1.05 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

EC50 72h algae (2)

0.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

Diiron trioxide (1309-37-1)

EC50 Daphnia 1 > 100 mg/l Test organisms (species): Daphnia magna

 Titanium Dioxide (13463-67-7)

 LC50 fish 1
 155 mg/l Test organisms (species): other:Japanese Medaka

 EC50 Daphnia 1
 19.3 mg/l Test organisms (species): Daphnia magna

 EC50 Daphnia 2
 27.8 mg/l Test organisms (species): Daphnia magna

 EC50 72h algae (1)
 > 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

 NOEC (chronic)
 ≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

quicklime (1305-78-8)	
LC50 fish 1	387 mg/l Test organisms (species): Poecilia reticulata
EC50 72h algae (1)	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h algae (1)	1130.3 mg/l Test organisms (species): Navicula seminulum
NOEC chronic fish	100 mg/l Test organisms (species): other:Tilapia nilotica Duration: '46 d'

12.2. Persistence and degradability

AŞANLAR CERAMIC POWDER	
Persistence and degradability	Not established.

Safety Data Sheet

according to Regulation (EU) 2015/830

silicon dioxide, amorphous (7631-86-9)	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

12.3. Bioaccumulative potential

AŞANLAR CERAMIC POWDER

Bioaccumulative potential Not established.

silicon dioxide, amorphous (7631-86-9)

Bioaccumulative potential Not bioaccumulative.

12.4. Mobility in soil

silicon dioxide, amorphous (7631-86-9)

Ecology - soil No (test)data on mobility of the substance available.

12.5. Results of PBT and vPvB assessment

Component

silicon dioxide, amorphous (7631-86-9)

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Product/Packaging disposal recommendations

Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials

: Avoid release to the environment.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID	
14.1. UN number					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.2. UN proper shippin	g name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.3. Transport hazard o	14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.4. Packing group					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
14.5. Environmental hazards					
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	
No supplementary informatio	on available				

Safety Data Sheet

according to Regulation (EU) 2015/830

14.6. Special precautions for user

Overland transport

Not applicable

Transport by sea

Not applicable

Air transport

Not applicable

Inland waterway transport

Not applicable

Rail transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
IMDG	International Maritime Dangerous Goods	
SDS	Safety Data Sheet	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
DPD	Dangerous Preparations Directive 1999/45/EC	
DSD	Dangerous Substances Directive 67/548/EEC	
EC50	Median effective concentration	
IARC	International Agency for Research on Cancer	

Safety Data Sheet

according to Regulation (EU) 2015/830

IATA	International Air Transport Association
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
CAS-No.	Chemical Abstract Service number
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
IOELV	Indicative Occupational Exposure Limit Value
N.O.S.	Not Otherwise Specified
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
TRGS	Technical Rules for Hazardous Substances
VOC	Volatile Organic Compounds
WGK	Water Hazard Class
	'

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16

December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

: This safety data sheet is issued by Lisam System Turkey (info@lisam-tr.com). None. Other information

Full text of H- and EUH-statements:		
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
Ox. Sol. 1	Oxidising Solids, Category 1	
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	
H271	May cause fire or explosion; strong oxidiser.	
H314	Causes severe skin burns and eye damage.	

Safety Data Sheet

according to Regulation (EU) 2015/830

H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.