

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Denspak O
CAS-No. : Mixture
Product code : 3021
Other means of identification : Olivine Ramming Mix

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Refractory
Recommended use : Industrial use

1.3. Supplier

RHI Magnesita
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA, 15205
United States
T 412-494-4491

Resco_SDS.TDS@rhimagnesita.com - WWW.RescoProducts.com

1.4. Emergency telephone number

Emergency number : EMERGENCY ONLY (CHEMTREC) USA & Canada 1-800-424-9300
Outside USA & Canada +1 703-741-5970

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification
Skin corrosion/irritation Category 2 H315 Causes skin irritation
Serious eye damage/eye irritation Category 2A H319 Causes serious eye irritation
Specific target organ toxicity – Single exposure, Category 3, H335 May cause respiratory irritation
Respiratory tract irritation
Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
Precautionary statements (GHS US) : P261 - Avoid breathing dust.
P280 - Wear Suitable respiratory equipment, protective gloves, eye protection.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Olivine	CAS-No.: 1317-71-1	75 – 95	Not classified
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤55%, aqueous solutions	CAS-No.: 1344-09-8	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2B, H320

Full text of hazard classes and H-statements : see section 16

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SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation	: Allow affected person to breathe fresh air.
First-aid measures after skin contact	: Gently wash with plenty of soap and water.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion	: Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Cough.
Symptoms/effects after eye contact	: Causes serious eye burns.

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: In case of fire, all extinguishing media allowed.

5.2. Specific hazards arising from the chemical

Fire hazard	: Not flammable.
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5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Prevent entry to sewers and public waters.
Protection during firefighting	: 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

Protective equipment	: [In case of inadequate ventilation] wear respiratory protection. Protective gloves. Safety glasses.
Emergency procedures	: Avoid contact with skin. Avoid contact with eyes.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment.
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6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
Methods for cleaning up	: On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Hygiene measures	: Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash skin thoroughly with mild soap and water.
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7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store this product in a dry location where it can be protected from the elements.
Incompatible products	: Strong acids. Chromic oxide may react with alkali at high temperatures under oxidizing conditions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls	: Emergency eye wash fountain with clean water. Dust when sawing or tear out. Provide adequate ventilation to minimize dust concentrations.
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8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

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Hand protection:

Wear protective gloves.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Dust on tear out. Wear appropriate mask

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Damp granular mixture.
Color	: Off-white
Odor	: None
Odor threshold	: No data available
pH	: > 10
Melting point	: > 2000 °F
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not flammable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: ≈ 2.5
Solubility	: Moderately soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

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sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
LD50 oral rat	> 2000 mg/kg (Rat, Oral)

Skin corrosion/irritation : Causes skin irritation.
pH: > 10

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
pH	11 – 13

Serious eye damage/irritation : Causes serious eye irritation.
pH: > 10

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
pH	11 – 13

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available
Symptoms/effects after inhalation : Cough.
Symptoms/effects after eye contact : Causes serious eye burns.

SECTION 12: Ecological information

12.1. Toxicity

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
LC50 - Fish [1]	210 mg/l (96 h, Brachydanio rerio, Pure substance)
EC50 - Crustacea [1]	216 mg/l (96 h, Daphnia magna, Pure substance)

12.2. Persistence and degradability

Denspak O (Mixture)	
Persistence and degradability	Rapidly degradable

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

Olivine (1317-71-1)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
Bioaccumulative potential	No bioaccumulation data available.

12.4. Mobility in soil

sodium silicate, alkaline 1.6/2.6, 35%≤concentration≤55%, aqueous solutions (1344-09-8)	
Ecology - soil	No data available.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

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SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

Department of Transportation (DOT)

In accordance with DOT

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Olivine	CAS-No. 1317-71-1	75 – 95%
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15.2. International regulations

CANADA

Olivine (1317-71-1)

Not listed on the Canadian DSL (Domestic Substances List)/NDSL (Non-Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Olivine (1317-71-1)

Exempt-Naturally Occurring Substances in accordance with 40 CFR 710.4(b)

15.3. US State regulations

No additional information available

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 7/16/2025

Other information : Report language name. English. In the event of any conflict between English and other language versions, the English version shall prevail.

Full text of hazard classes and H-statements	
H315	Causes skin irritation
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

Safety Data Sheet (SDS), USA

This information and recommendations set forth herein are taken from sources believed to be accurate as of the date herein, however, Resco Products, Inc. makes no warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.