

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

1.3. Supplier

Resco Products, Inc.
 One Robinson Plaza, Suite 300
 6600 Steubenville Pike
 Pittsburgh, PA 15205 - United States
 412-494-4491
SDS@RescoProducts.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 H315 Causes skin irritation
 Category 2
 Serious eye damage/eye irritation H319 Causes serious eye irritation
 Category 2
 Specific target organ toxicity (single exposure) H335 May cause respiratory irritation
 Category 3

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) : 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
 P337+P313 - If eye irritation persists: Get medical advice/attention.
 P332+P313 - If skin irritation occurs: 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)

Not applicable

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

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Allow victim 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.

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

Symptoms/effects after inhalation : Coughing.

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 : No unsuitable extinguishing media known.

5.2. Specific hazards arising from the chemical

Fire hazard : Non-flammable.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : No specific fire-fighting instructions required.

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 : 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.

6.2. Environmental precautions

No additional information available

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.

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

sodium silicate, alkaline 1.6/2.6, 35%<=conc<=55%, aqueous solutions (1344-09-8)

Not applicable

Olivine (1317-71-1)

Not applicable

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

No additional information available

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 : No data available

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) : Non flammable.

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

Relative density : ≈ 2.5

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Solubility	: Moderately soluble in 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 : Not classified

sodium silicate, alkaline 1.6/2.6, 35%<=conc<=55%, aqueous solutions (1344-09-8)

LD50 oral rat	> 2000 mg/kg (Rat)
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Symptoms/effects after inhalation	: Coughing.

SECTION 12: Ecological information

12.1. Toxicity

sodium silicate, alkaline 1.6/2.6, 35%<=conc<=55%, aqueous solutions (1344-09-8)

EC50 Daphnia 1	216 mg/l (EC50; 96 h)
LC50 fish 2	210 mg/l (LC50; 96 h)

12.2. Persistence and degradability

sodium silicate, alkaline 1.6/2.6, 35%<=conc<=55%, aqueous solutions (1344-09-8)

Persistence and degradability	Biodegradability: not applicable. No (test) data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

sodium silicate, alkaline 1.6/2.6, 35%<=conc<=55%, aqueous solutions (1344-09-8)

Bioaccumulative potential	No bioaccumulation data available.
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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations

13.1. Disposal methods

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

SECTION 14: Transport information

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 listed, or excluded from listing, 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

No additional information available

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

Revision date : 12/20/2018

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 H-phrases:

H315	Causes skin irritation
H320	Causes eye irritation

SDS US (GHS HazCom 2012)

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