

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 6/1/2015 Revision date: 11/4/2024 Supersedes: 10/27/2021

#### **SECTION 1: Identification**

#### 1.1. Identification

Product form : Mixture
Product name : Slurry Coat Winter

CAS-No. : Mixture Product code : 3281

Other means of identification : Alumina-Silicate Wet Air Set Mortar-Slurry

#### 1.2. Recommended use and restrictions on use

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

#### 1.3. Supplier

Resco Products, Inc.
One Robinson Plaza, Suite 300
6600 Steubenville Pike
Pittsburgh, PA, 15205
United States
T 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

Flammable liquids Category 3

Acute toxicity (oral) Category 4

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2B

H226

H302

Harmful if swallowed

Causes skin irritation

Causes eye irritation

Causes eye irritation

Carcinogenicity Category 1A H350 May cause cancer (After drying or heating, Inhalation)

Specific target organ toxicity (single exposure) Category 1 H370 Causes damage to organs

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) : Danger

Hazard statements (GHS US) : H226 - Flammable liquid and vapor

H302 - Harmful if swallowed H315 - Causes skin irritation H320 - Causes eye irritation

H350 - May cause cancer (After drying or heating, Inhalation)

H370 - Causes damage to organs

Precautionary statements (GHS US) : P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P243 - Take precautionary measures against static discharge.
P260 - Do not breathe vapors, After drying or heating, dust.
P270 - Do not eat, drink or smoke when using this product.
P280 - Wear eye protection, protective gloves, protective clothing.
P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P330 - Rinse mouth.

P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use media other than water to extinguish.

#### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Although methanol is practically non-toxic to animals, it is very toxic to humans.

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#### 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
quartz	CAS-No.: 14808-60-7	20 – 50	Carc. 1A, H350
methanol	CAS-No.: 67-56-1	5 – 10	Flam. Liq. 2, H225 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 STOT SE 1, H370
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 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 Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Gently wash with plenty of soap and water. Take off contaminated clothing and wash it before

reuse.

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 : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

Potential Adverse human health effects and symptoms : Dust on tear out. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Symptoms/effects after inhalation : After drying or heating. Danger of serious damage to health by prolonged exposure through

inhalation. May cause cancer by inhalation. Causes skin irritation.

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

#### 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 : Carbon dioxide. Dry powder. Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Specific hazards arising from the chemical

Fire hazard : Flammable liquid and vapor. Contains methanol in excess of LEL. It is unlikely that combustion

will be sustained due to high water and clay content.

Explosion hazard : Prolonged exposure to fire may cause containers to rupture/explode.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering

environment.

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

Emergency procedures : If spilled, may cause the floor to be slippery.

**6.1.2. For emergency responders**Protective equipment

: Equip cleanup crew with proper protection.

Emergency procedures : Stop release.

#### 6.2. Environmental precautions

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

For containment : Plug the leak, cut off the supply.

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Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect

spillage.

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with eyes. Avoid contact with skin.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or

smoking and when leaving work.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in original container. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### **Slurry Coat Winter (Mixture)**

No additional information available

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

No additional information available

#### methanol (67-56-1)

#### **USA - ACGIH - Occupational Exposure Limits**

 ACGIH OEL TWA [ppm]
 200 ppm

 ACGIH OEL STEL [ppm]
 250 ppm

#### quartz (14808-60-7)

#### **USA - ACGIH - Occupational Exposure Limits**

ACGIH OEL TWA 0.025 mg/m³ (Silica-Crystalline Quartz; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value; Respirable fraction)

#### **USA - OSHA - Occupational Exposure Limits**

 Local name
 Silica, crystalline quartz, respirable dust

 OSHA PEL (TWA) [1]
 0.05 mg/m³ respirable dust

 Remark (OSHA)
 (3) See Table Z-3.

#### 8.2. Appropriate engineering controls

Appropriate engineering controls : Emergency eye wash fountain with clean water. Dust on tear out. Provide adequate ventilation to

minimize dust concentrations.

#### 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### Hand protection:

Wear protective gloves.

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

After air drying or heating. Dust on tear out. Wear appropriate mask

#### Other information:

Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Slurry.
Color : light brown
Odor : alcohol odor
Odor threshold : No data available

pH : > 10

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Melting point : > 2500 °F Freezing point ≈ 20 °F Boiling point No data available Flash point ≈ 120 °F

Relative evaporation rate (butyl acetate=1) No data available Flammability (solid, gas) Combustible liquid. Vapor pressure No data available Relative vapor density at 20°C No data available

Relative density ≈ 1.5

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 Not Applicable 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

Air Setting.

#### 10.2. Chemical stability

Not established.

#### 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

No additional information available

### 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.

#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Harmful if swallowed. Acute toxicity (oral) Acute toxicity (dermal) Not classified Acute toxicity (inhalation) Not classified

#### **Slurry Coat Winter (Mixture)**

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

> 2000 mg/kg (Rat, Oral) I D50 oral rat

ATE US (oral)

methanol (67-56-1)	
LD50 oral rat	1187 – 2769 mg/kg body weight (BASF test, Rat, Male / female, Experimental value, 15-35 % aqueous solution, Oral, 7 day(s))
LD50 dermal rabbit	17100 mg/kg (Rabbit, Inconclusive, insufficient data, Dermal)
LC50 Inhalation - Rat	128.2 mg/l air (BASF test, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust. mist)	0.5 mg/l/4h

500 mg/kg body weight

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Skin corrosion/irritation	: Causes skin irritation. pH: > 10
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	55%, aqueous solutions (1344-09-8)
рН	11 – 13
methanol (67-56-1)	
pH	No data available in the literature
quartz (14808-60-7)	
pH	6 – 7
Serious eye damage/irritation	: Causes eye irritation. pH: > 10
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	55%, aqueous solutions (1344-09-8)
рН	11 – 13
methanol (67-56-1)	
рН	No data available in the literature
quartz (14808-60-7)	
рН	6 – 7
Respiratory or skin sensitization Germ cell mutagenicity	: Not classified : Not classified
carcinogenicity quartz (14808-60-7)	: May cause cancer (After drying or heating, Inhalation).
IARC group	1 - Carcinogenic to humans
Reproductive toxicity	: Not classified
STOT-single exposure	: Causes damage to organs.
methanol (67-56-1)	
STOT-single exposure	Causes damage to organs.
STOT-repeated exposure Aspiration hazard Viscosity, kinematic Potential Adverse human health effects and symptoms Symptoms/effects after inhalation Symptoms/effects after skin contact Symptoms/effects after eye contact	<ul> <li>Not classified</li> <li>Not classified</li> <li>Not Applicable</li> <li>Dust on tear out. Harmful: danger of serious damage to health by prolonged exposure through inhalation.</li> <li>After drying or heating. Danger of serious damage to health by prolonged exposure through inhalation. May cause cancer by inhalation.</li> <li>Causes skin irritation.</li> <li>Causes serious eye irritation.</li> </ul>
SECTION 12: Ecological information	
12.1. Toxicity	
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	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)
methanol (67-56-1)	
LC50 - Fish [1]	15400 mg/l (EPA 660/3 - 75/009, 96 h, Lepomis macrochirus, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	18260 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 96 h, Daphnia magna, Semistatic system, Fresh water, Experimental value, Locomotor effect)
EC50 96h - Algae [1]	22000 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)

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12.2. Persistence and degradability	
Slurry Coat Winter (Mixture)	
Persistence and degradability	Not established.
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	55%, aqueous solutions (1344-09-8)
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD BOD (% of ThOD)	Not applicable
·	Not applicable
methanol (67-56-1)	Doodily biodogradoble is the sail Doodily biodogradoble is water
Persistence and degradability Biochemical oxygen demand (BOD)	Readily biodegradable in the soil. Readily biodegradable in water.  0.6 – 1.12 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.42 g O <sub>2</sub> /g substance
ThOD	1.5 g $O_2/g$ substance
quartz (14808-60-7)	, 10 g 0 g g 0 m 0 m 10 g
Persistence and degradability	Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
12.3. Bioaccumulative potential	
Slurry Coat Winter (Mixture)	
Bioaccumulative potential	Not established.
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	
Bioaccumulative potential	No bioaccumulation data available.
	NO DIOACCUITUIATION data available.
methanol (67-56-1) BCF - Fish [1]	1 – 4.5 (72 h, Cyprinus carpio, Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-0.77 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
quartz (14808-60-7)	Low potential for bloaded malation (Delt 1 000).
Bioaccumulative potential	No data available.
12.4. Mobility in soil	TTO data diffallabio.
sodium silicate, alkaline 1.6/2.6, 35%≤conc≤	
Ecology - soil	No data available.
methanol (67-56-1)	Al La Hall I de Pa
Surface tension	No data available in the literature
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	-0.89 – -0.21 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.
12.5. Other adverse effects	in ig.ii) mosile in som
	: None known
	: None known : Avoid release to the environment.
	. Avoid release to the environment.
SECTION 13: Disposal considerations	
13.1. Disposal methods	
Product/Packaging disposal recommendations Ecology - waste materials	Dispose in a safe manner in accordance with local/national regulations.  Avoid release to the environment.
SECTION 14: Transport information	Avoid release to the environment.
In accordance with DOT / TDG / IMDG / IATA	
14.1. UN number	
UN1993	
14.2. UN proper shipping name	
Proper Shipping Name (DOT)	Flammable liquids, n.o.s.
Proper Shipping Name (TDG)	: Not applicable
Proper Shipping Name (IMDG)	: Not applicable
	: Not applicable
14.3. Transport hazard class(es)	
DOT Transport hazard class(es) (DOT)	: 3
	: 3
	-

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**TDG** 

Transport hazard class(es) (TDG) : Not applicable

IMDG

Transport hazard class(es) (IMDG) : Not applicable

IATA

Transport hazard class(es) (IATA) : 3 (6.1) Hazard labels (IATA) : 3, 6.1





#### 14.4. Packing group

Packing group (DOT) : III

Packing group (TDG) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : II

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

DOT

UN-No.(DOT) : UN1993

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the

bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this

subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief

devices are authorized on DOT 57 portable tanks.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous

materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail (49 : 60 L
CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 220 L

CFR 175.75)

DOT Vessel Stowage Location : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a

passenger vessel.

TDG

No data available

IMDG

No data available

IATA

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 352
PCA max net quantity (IATA) : 1L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L

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Special provision (IATA) : A104, A113 ERG code (IATA) : 3L

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

#### **Slurry Coat Winter (Mixture)**

Note This information must be included in all SDS's that are copied and distributed for this material.

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

#### methanol (67-56-1)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ 5000 lb

#### 15.2. International regulations

#### **CANADA**

No additional information available

#### **EU-Regulations**

No additional information available

National regulations

#### quartz (14808-60-7)

Listed on IARC (International Agency for Research on Cancer)

#### 15.3. US State regulations

U.S California - Proposition 65 - Other	This product can expose you to chemicals including quartz, which is known to the State of California to
information	cause cancer, and methanol, which is known to the State of California to cause birth defects or other
	reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous
	Substance List; U.S Pennsylvania - RTK (Right to Know) List
Quartz (14808-60-7)	U.S New Jersey - Right to Know Hazardous Substance List

#### **SECTION 16: Other information**

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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	
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H315	Causes skin irritation
H320	Causes eye irritation
H331	Toxic if inhaled
H350	May cause cancer
H370	Causes damage to organs

Safety Data Sheet (SDS), USA

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