Alum Roof Coating

Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.
Issue date: 4/6/2022 Revision date: 4/6/2022 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Alum Roof Coating

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Reflective Roof Coating
Restrictions on use : For external use only. Do not use indoors.

1.3. Supplier

Manufacturer
Sakrete of North America
625 Griffith Rd., Ste 100
Charlotte, NC 28217
T 866-725-7383

1.4. Emergency telephone number

Emergency number : CHEMTREC (800) 424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flam. Liq. 3	Flammable liquid and vapor
Skin Irrit. 2	Causes skin irritation
Carc. 1A	May cause cancer
STOT RE 1	Causes damage to organs (Lungs) through prolonged or repeated exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger
Hazard statements (GHS US) : Flammable liquid and vapor
Causes skin irritation
May cause cancer
Causes damage to organs (Lungs) through prolonged or repeated exposure
Precautionary statements (GHS US) : Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/fume/gas/mist/vapors/spray.

Wash hands, forearms and face thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed or concerned: Get medical advice/attention
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
Take off contaminated clothing and wash it before reuse.
If skin irritation occurs: Get medical advice/attention..
Get medical advice/attention if you feel unwell.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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	%
Stoddard solvent	CAS-No.: 8052-41-3	30 – 40
Limestone	CAS-No.: 1317-65-3	20 – 30
Asphalt	CAS-No.: 8052-42-4	20 – 30
Aluminum	CAS-No.: 7429-90-5	0 – 10
Microcrystalline cellulose	CAS-No.: 9004-34-6	0 – 10
Naphtha, petroleum, hydrodesulfurized heavy	CAS-No.: 64742-82-1	0 – 10
nonane	CAS-No.: 111-84-2	0 – 10
Quartz	CAS-No.: 14808-60-7	0 – 10

The concentrations listed represent actual ranges that result from batch variability.

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

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. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

Symptoms/effects after inhalation	:	May cause irritation to the respiratory tract.
Symptoms/effects after skin contact	:	Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.
Symptoms/effects after eye contact	:	May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Symptoms/effects after ingestion	:	May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Chronic symptoms	:	Causes damage to organs (Lungs) through prolonged or repeated exposure. May cause cancer through inhalation of dust.

4.3. Immediate medical attention and special treatment, if necessary

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	:	Dry chemical, carbon dioxide, sand, foam or water fog
Unsuitable extinguishing media	:	Do not use water jet.

5.2. Specific hazards arising from the chemical

Fire hazard	:	Flammable liquid and vapor. Products of combustion may include, and are not limited to: oxides of carbon. Toxic gases may be released
Explosion hazard	:	May form flammable/explosive vapor-air mixture.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	:	Move containers away from the fire area if this can be done without risk. Cool closed containers exposed to fire with water spray.
Protection during firefighting	:	Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	:	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Use special care to avoid static electric charges. Remove all sources of ignition.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment	:	Stop leak if safe to do so. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Do not flush into surface water or sewer system. Wear recommended personal protective equipment.
Methods for cleaning up	:	Scoop up material and place in a disposal container. Provide ventilation.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.

Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Avoid contact with skin and eyes. Do not breathe dust, fume, gas, mist, spray, vapors. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Use only in well-ventilated areas.

Hygiene measures : Wash contaminated clothing before reuse. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Proper grounding procedures to avoid static electricity should be followed.

Storage conditions : Keep out of the reach of children. Store in dust-tight, dry, labelled containers. Keep containers closed when not in use. Do not store in an area equipped with emergency water sprinklers. Store in a dry, cool and well-ventilated place. Store locked up. Keep away from food, drink and animal feedingstuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Alum Roof Coating
No additional information available

Stoddard solvent (8052-41-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Stoddard solvent
ACGIH OEL TWA [ppm]	100 ppm
Remark (ACGIH)	TLV® Basis: Eye, skin, & kidney dam; nausea; CNS impair
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Limits	
Local name	Stoddard solvent
OSHA PEL (TWA) [1]	2900 mg/m³
OSHA PEL (TWA) [2]	500 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Limestone (1317-65-3)	
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Asphalt (8052-42-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.5 mg/m³ (fume, inhalable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen fume, coal tar-free
USA - ACGIH - Biological Exposure Indices	
BEI (BLV)	2.5 µg/l Parameter: 1-Hydroxypyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (background) Parameter: 3-Hydroxybenzo(a)pyrene with hydrolysis - Medium: urine - Sampling time: end of shift at end of workweek (nonquantitative)

Aluminum (7429-90-5)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m³ (respirable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Microcrystalline cellulose (9004-34-6)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	10 mg/m³
USA - OSHA - Occupational Exposure Limits	
OSHA PEL (TWA) [1]	15 mg/m³ (total dust) 5 mg/m³ (respirable fraction)

Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)
No additional information available

nonane (111-84-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm

Quartz (14808-60-7)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.025 mg/m³ (respirable particulate matter)
ACGIH chemical category	Suspected Human Carcinogen
USA - OSHA - Occupational Exposure Limits	
Local name	Quartz (Total Dust) (Silica: Crystalline)
OSHA PEL (TWA) [1]	50 µg/m³ (Respirable crystalline silica)
Remark (OSHA)	Table Z-3. For OSHA PEL (TWA) use formula: (30 mg/m3 / (%SiO2+2)) for mg/m3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-3 Mineral Dusts

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station. Provide readily accessible eye wash stations and safety showers.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:
Wear suitable waterproof gloves

Eye protection:
Wear approved eye (properly fitted dust- or splash-proof chemical safety goggles) / face (face shield) protection.

Skin and body protection:
Wear suitable waterproof protective clothing

Respiratory protection:
A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).

Other information:
Handle according to established industrial hygiene and safety practices. Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Viscous
Color	:	Aluminum (Silver)
Odor	:	Solvents (Mineral Spirits)
Odor threshold	:	1 – 30 ppm
pH	:	No data available
Melting point	:	-70 °C / -94 °F
Freezing point	:	No data available
Boiling point	:	>154 °C / 310 °F
Flash point	:	> 40.5 °C / 105 °F
Relative evaporation rate (butyl acetate=1)	:	0.1
Flammability (solid, gas)	:	Flammable liquid and vapor.
Upper Flammability limit	:	7.0
Lower Flammability limit	:	1.6
Vapor pressure	:	0.3 kPa
Relative vapor density at 20 °C	:	5.3
Relative density	:	0.98
Density	:	8.0 – 8.4 lbs/gal
Solubility	:	Insoluble in water. Soluble in aromatic and aliphatic solvents
Partition coefficient n-octanol/water	:	No data available
Auto-ignition temperature	:	330 °C / 626 °F
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

VOC content : <400 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Incompatible materials. Sources of ignition. Direct sunlight.

10.5. Incompatible materials

Wet cement is alkaline and incompatible with acid, ammonium salts and aluminum metal. Oxidizing agents.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon. May release flammable gases.

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

Stoddard solvent (8052-41-3)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rabbit	> 3000 mg/kg
LC50 inhalation rat	> 5.5 mg/l/4h

Asphalt (8052-42-4)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 94.4 mg/m³ (Exposure time: 4.5 h)

Aluminum (7429-90-5)	
LD50 oral rat	> 15900 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 inhalation rat	> 0.888 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:

Microcrystalline cellulose (9004-34-6)	
LD50 oral rat	> 5 g/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat	> 5800 mg/m³ (Exposure time: 4 h)

Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

nonane (111-84-2)	
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity)
LC50 inhalation rat	17 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 14 - 21
LC50 inhalation rat	3200 ppm/4h

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Not classified

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

Asphalt (8052-42-4)	
IARC group	2B - Possibly carcinogenic to humans
In OSHA Hazard Communication Carcinogen list	Yes

Quartz (14808-60-7)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : Not classified

Aluminum (7429-90-5)	
NOAEL (animal/male, F0/P)	1000 mg/kg body weight 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

nonane (111-84-2)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Causes damage to organs (lungs) through prolonged or repeated exposure.
Respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (NTP) as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

Stoddard solvent (8052-41-3)	
NOAEL (oral,rat,90 days)	1056 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Remarks on results: other:
NOAEL (dermal,rat/rabbit,90 days)	2000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Stoddard solvent (8052-41-3)	
STOT-repeated exposure	Causes damage to organs (central nervous system) through prolonged or repeated exposure.

Limestone (1317-65-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Asphalt (8052-42-4)	
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.0207 mg/l air Animal: rat, Guideline: other:OECD 451

Aluminum (7429-90-5)	
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.05 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (subchronic,oral,animal/male,90 days)	1034 mg/kg body weight Animal: dog, Animal sex: male, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)
NOAEL (subchronic,oral,animal/female,90 days)	1087 mg/kg body weight Animal: dog, Animal sex: female, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)

Naphtha, petroleum, hydrodesulfurized heavy (64742-82-1)	
STOT-repeated exposure	Causes damage to organs (Lungs) through prolonged or repeated exposure.

nonane (111-84-2)	
NOAEL (oral,rat,90 days)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEC (inhalation,rat,vapor,90 days)	24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (subchronic,oral,animal/male,90 days)	100 mg/kg body weight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

Quartz (14808-60-7)	
STOT-repeated exposure	Causes damage to organs (Lungs) through prolonged or repeated exposure.

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : May cause irritation to the respiratory tract.

Symptoms/effects after skin contact : Causes skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin.

Symptoms/effects after eye contact : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic symptoms : Causes damage to organs (Lungs) through prolonged or repeated exposure. May cause cancer through inhalation of dust.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : May cause long-term adverse effects in the aquatic environment.

Stoddard solvent (8052-41-3)	
LC50 - Fish [1]	2.5 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
NOEC (chronic)	0.1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

nonane (111-84-2)	
EC50 - Crustacea [1]	0.2 mg/l Test organisms (species): Daphnia magna
LOEC (chronic)	0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

12.2. Persistence and degradability

Alum Roof Coating	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Alum Roof Coating	
Bioaccumulative potential	Not established.

Asphalt (8052-42-4)	
BCF - Fish [1]	(no bioaccumulation expected)
Partition coefficient n-octanol/water	> 6

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

SECTION 13: Disposal considerations

13.1. Disposal methods

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. The generation of waste should be avoided or minimized wherever possible.

Additional information : Handle empty containers with care because residual vapors are flammable.

SECTION 14: Transport information

In accordance with DOT

14.1. UN number

DOT NA No : UN1993

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Stoddard solvent)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 3

Hazard labels (DOT) : 3

14.4. Packing group

Packing group (DOT) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

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

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

15.2. International regulations

No additional information available

15.3. US State regulations

WARNING: This product can expose you to chemicals including Bitumens and Quartz, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012.

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Other information : None.
Prepared by : Nexreg Compliance Inc.
www.Nexreg.com

Full text of H-phrases	
Carc. 1A	Carcinogenicity Category 1A
Flam. Liq. 3	Flammable liquids Category 3
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1

Safety Data Sheet (SDS), USA

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