



Diamonite

Safety Data Sheet

According to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012 and the Hazardous Products Regulations (HPR) WHMIS 2015

Date of issue: 04/23/2020

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Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Diamonite

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

Use of the substance/mixture : Concrete additive

1.3. Details of the supplier of the safety data sheet

Supplier

Vanguard ADA Systems
18122 SR9 SE, Suite F
Snohomish, WA. 98296
T 360-668-5700

1.4. Emergency telephone number

Emergency number : 360-668-5700

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

GHS classification

Eye Irrit. 2A
Resp. Sens. 1
Skin Sens. 1
Muta. 1B
Carc. 1A
Repr. 1B

2.2. Label elements

GHS labelling

Hazard pictograms (GHS) :



GHS08

Signal word (GHS) :

: Danger

Hazard statements (GHS) :

: May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. May cause cancer. May damage fertility or the unborn child.

Precautionary statements (GHS) :

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands, forearms and face thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory protection. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. If inhaled: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or doctor. 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. If exposed or concerned: Get medical advice/attention. 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

No additional information available

2.4. Unknown acute toxicity

Not applicable

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%
Calcium chloride	(CAS-No.) 10043-52-4	5 - 10
Potassium hydroxide	(CAS-No.) 1310-58-3	0.1 - 1
Chromic acid (H ₂ Cr ₂ O ₇), disodium salt	(CAS-No.) 10588-01-9	0.1 - 1

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

SECTION 4: First-aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- 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 or rash 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. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell.

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

- Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
- Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
- Chronic symptoms : May cause genetic defects. May cause cancer. May damage fertility or the unborn child.

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

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. Extinguishing media

- Suitable extinguishing media : None necessary under normal conditions of use.
- Unsuitable extinguishing media : Not applicable.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : No hazardous thermal decomposition products.

5.3. Advice for firefighters

- 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.

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.

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6.3. Methods and material for containment and cleaning up

- For containment : 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 : Sweep or shovel spills into appropriate container for disposal. 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

- Precautions for safe handling : Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
- Hygiene measures : Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace. Wash hands, forearms and face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Store locked up.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Calcium chloride (10043-52-4)		
Not applicable		
Potassium hydroxide (1310-58-3)		
ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
NIOSH	NIOSH REL (ceiling) (mg/m ³)	2 mg/m ³
Chromic acid (H ₂ CrO ₇), disodium salt (10588-01-9)		
Not applicable		

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
- Hand protection : Wear rubber gloves.
- Eye protection : Wear eye/face protection.
- Skin and body protection : Wear suitable protective clothing.
- Respiratory protection : Wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Environmental exposure controls : Avoid release to the environment.
- Other information : Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
- Appearance : Greenish liquid. Clear.
- Colour : Green
- Odour : No odor.
- Odour threshold : No data available
- pH : No data available
- Melting point : No data available
- Freezing point : No data available
- Boiling point : > 200 °F / 392 °C
- Flash point : No data available
- Relative evaporation rate (butylacetate=1) : No data available

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Flammability (solid, gas)	: Not flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1.1 – 1.2
Solubility	: Soluble in water.
Partition coefficient n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

No additional information available

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.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

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

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.

Calcium chloride (10043-52-4)	
LD50 oral rat	1000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg

Chromic acid (H2Cr2O7), disodium salt (10588-01-9)	
LD50 oral rat	46 mg/kg
LD50 dermal rabbit	960 mg/kg
LC50 inhalation rat	200 mg/m ³ (Exposure time: 4 h)
ATE CA (Gases)	100 ppmv/4h
ATE CA (vapours)	0.2 mg/l/4h
ATE CA (dust,mist)	0.2 mg/l/4h

Skin corrosion/irritation	: Not classified.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ cell mutagenicity	: May cause genetic defects.
Carcinogenicity	: May cause cancer.

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Chromic acid (H₂Cr₂O₇), disodium salt (10588-01-9)	
IARC group	1 - Carcinogenic to humans
National Toxicology Program (NTP) Status	2 - Known Human Carcinogens
In OSHA Hazard Communication Carcinogen list	Yes

Reproductive toxicity : May damage fertility or the unborn child.
 STOT-single exposure : Not classified.
 STOT-repeated exposure : Not classified.

Chromic acid (H₂Cr₂O₇), disodium salt (10588-01-9)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified.
 Symptoms/effects after inhalation : May cause irritation to the respiratory tract. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Symptoms/effects after skin contact : May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. May cause an allergic skin reaction.
 Symptoms/effects after eye contact : Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
 Symptoms/effects after ingestion : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea.
 Chronic symptoms : May cause genetic defects. May cause cancer. May damage fertility or the unborn child.
 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.

Calcium chloride (10043-52-4)	
LC50 fish 1	10650 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
EC50 Daphnia 1	2280000 – 3948000 µg/l (Exposure time: 48 h - Species: Daphnia magna)

Chromic acid (H₂Cr₂O₇), disodium salt (10588-01-9)	
LC50 fish 1	33.2 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	0.098 – 0.129 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	69 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])

12.2. Persistence and degradability

Diamonite	
Persistence and degradability	Not established.

Calcium chloride (10043-52-4)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Diamonite	
Bioaccumulative potential	Not established.

Calcium chloride (10043-52-4)	
BCF fish 1	(no bioaccumulation)
Bioaccumulative potential	Not established.

Potassium hydroxide (1310-58-3)	
Partition coefficient n-octanol/water	0.65

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : No other effects known.

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SECTION 13: Disposal considerations

13.1. Waste treatment 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.

SECTION 14: Transport information

Department of Transportation (DOT) and Transportation of Dangerous Goods (TDG)

In accordance with DOT/TDG

Not regulated

SECTION 15: Regulatory information

15.1. 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

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Sulfuric acid, aluminum salt (3:2)(10043-01-3)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List
Potassium hydroxide(1310-58-3)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List
Sodium hydroxide(1310-73-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Revision date : 04/23/2020

Other information : None.

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