

NanoSafeguard

Material Safety Data Sheet

Abrasive Cleaner

1 . Product and company identification

Common name : Abrasive Cleaner, Glass and Ceramics Cleaner
Material uses : Not available.
Supplier/Manufacturer : NanoSafeguard
Rainier Ave. S, Suite 3
Seattle, WA 98118
USA
TEL: 703 944 7690
In case of emergency : +1 800 255-3924 (Chemtel 24 hours emergency response.)

2 . Hazards identification

Physical state : Liquid. (Milky-turbid, medium viscous suspension.)
Odor : Faint-soapy.
Color : Milky-beige.
Hazard status : This material is classified as hazardous under OSHA regulations.
Emergency overview : WARNING !
CANCER HAZARD.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
CAUSES SEVERE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.
Avoid contact with skin and clothing. Avoid breathing vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure.
Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.
Potential acute health effects
Eyes : Severely irritating to eyes.
Skin : Severely irritating to the skin.
Inhalation : Severely irritating to the respiratory system.
Ingestion : No known significant effects or critical hazards.
Potential chronic health effects : Carcinogenic effects Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by NIOSH [Silica crystalline, quartz]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Silica crystalline, quartz].
Mutagenic effects Not available.
Teratogenic effects Not available.
Medical conditions aggravated by over-exposure : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation.

See toxicological information (section 11)

3 . Composition/information on ingredients

United States

Name	CAS number	%
Silica crystalline, quartz	14808-60-7	10 - 30
Citric acid, monohydrate	5949-29-1	1 - 5

4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 20 minutes. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

5 . Fire-fighting measures

- Flammability of the product** : Non-flammable.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
- Environmental precautions** : Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Avoid contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Avoid breathing vapor or mist. Wash thoroughly after handling.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Store between 15°C and 25°C.

8 . Exposure controls/personal protection

United States

Product name

Silica crystalline, quartz

Exposure limits

NIOSH REL (United States, 12/2001).

TWA: 0,05 mg/m³ 10 hour(s).

OSHA PEL Z3 (United States, 9/2005).

TWA: 10 mg/m³ 8 hour(s). Form: Respirable

TWA: 30 mg/m³ 8 hour(s). Form: Total dust.

TWA: 250 MPPCF 8 hour(s). Form: Respirable

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

- Eyes** : Safety glasses.
- Skin** : Lab coat.
- Respiratory** : A respirator is not needed under normal and intended conditions of use.
- Hands** : Natural rubber (latex).



HMIS Code/Personal protective equipment : B

Personal protection in case of a large spill : Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear.

Hygiene measures : Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

9 . Physical and chemical properties

- Physical state** : Liquid. (Milky-turbid, medium viscous suspension.)
- Color** : Milky-beige.
- Odor** : Faint-soapy.
- pH** : 1.5 to 2 [Acidic.]
- Boiling/condensation point** : 100°C (212°F)
- Melting/freezing point** : May start to solidify at 0°C (32°F) based on data for: Water.
- Relative density** : 1.3 (Water = 1)
- Vapor pressure** : The highest known value is 2.3 kPa (17.5 mm Hg) (at 20°C) (Water).
- Vapor density** : The highest known value is 0.62 (Air = 1) (Water).
- Evaporation rate** : 0.36 (Water) compared with Butyl acetate.
- Solubility** : Miscible in water.

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Incompatibility with various substances** : Reactive with oxidizing materials.
- Hazardous polymerization** : Will not occur.
- Conditions of reactivity** : None known.

11 . Toxicological information**Acute Effects**

- Eyes** : Severely irritating to eyes.
- Skin** : Severely irritating to the skin.
- Inhalation** : Severely irritating to the respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Potential chronic health effects** : Carcinogenic effects: Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by NIOSH [Silica crystalline, quartz]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Silica crystalline, quartz].
Mutagenic effects: Not available.
Teratogenic effects: Not available.

12 . Ecological information

- Environmental precautions** : No known significant effects or critical hazards.
- Products of degradation** : These products are carbon oxides and water, nitrogen oxides. Some metallic oxides.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material, runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

14 . Transport information

NAERG : Not applicable.

Regulatory information

UN/ IMDG/IATA DOT : Not regulated.

15 . Regulatory information

United States

HCS Classification : Irritating material
Carcinogen

U.S. Federal regulations : TSCA : All components listed.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Silica crystalline, quartz; Citric acid, monohydrate

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Silica crystalline, quartz: Immediate (acute) health hazard, Delayed (chronic) health hazard; Citric acid, monohydrate: Immediate (acute) health hazard

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

State regulations : Pennsylvania RTK: Silica crystalline, quartz: (generic environmental hazard)
Massachusetts RTK: Silica crystalline, quartz
New Jersey: Silica crystalline, quartz

WARNING: This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Silica crystalline, quartz	Yes.	No.	No.	No.

International lists : This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, in Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

16 . Other information

Label requirements (U.S.A.) : CANCER HAZARD.
CONTAINS MATERIAL WHICH CAN CAUSE CANCER.
CAUSES SEVERE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

Hazardous Material Information System (U.S.A.) :

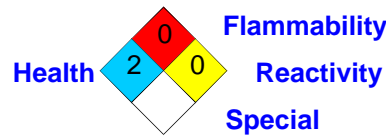
HMIS RATING

Health	*	2
Fire hazard		0
Physical Hazard		0
Personal protection		B

HAZARD RATINGS

4- Extreme
3- Serious
2- Moderate
1- Slight
0- Minimal
See section 8 for more detailed information on personal protection.

National Fire Protection Association (U.S.A.) :



References : ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG.

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.