Material Safety Data Sheet

HG high power grout cleaner

1. Product and company identification

Product name : HG high power grout cleaner

Pinnacle Home Solutions LLC 8711 E Pinnacle Peak Road

Scottsdale AZ 85255

Email info@PinnacleHomeSolutions.com

Tel 1.480.513.1317

Manufacturer : HG International BV

Damsluisweg 70 - NL-1332 EJ - Almere - The Netherlands

+31 36 54 94 700

Code : Not available.

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Validation date : 15-1-2013.

Print date : 15-1-2013.

<u>In case of emergency</u> : +31 (0)36 54 94 777

Product type : Liquid.

2. Hazards identification

Emergency overview

Physical state : Liquid.

Color : Colorless to light yellow.

Odor : Characteristic.
Signal word : WARNING!

Hazard statements : CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE

TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON

ANIMAL DATA.

Precautionary measures: Do not handle until all safety precautions have been read and understood. Obtain

special instructions before use. Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Use personal protective equipment as required. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Potential acute health effects

Inhalation: Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

Ingestion : No known significant effects or critical hazards.

Skin : Severely irritating to the skin.

Eyes : Severely irritating to eyes. Risk of serious damage to eyes.

Potential chronic health effects

Chronic effects: Contains material that may cause target organ damage, based on animal data.

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer

depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.Fertility effects: No known significant effects or critical hazards.

2. Hazards identification

Target organs

: Contains material which may cause damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea.

Over-exposure signs/symptoms

Inhalation: No specific data.Ingestion: No specific data.

Skin : Adverse symptoms may include the following:

irritation redness

Eyes: Adverse symptoms may include the following:

pain or irritation watering redness

Medical conditions aggravated by over-exposure

: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

| Name | CAS number | % |
|--|------------|---------|
| Carbonic acid sodium salt (1:2) | 497-19-8 | 1 - 5 |
| sodium hydroxide | 1310-73-2 | 1 - 5 |
| glycine, n,n-bis(carboxymethyl)-, trisodium salt | 5064-31-3 | 0.1 - 1 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician

: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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5. Fire-fighting measures

Flammability of the product : In a fire or if heated, a pressure increase will occur and the container may burst.

Extinguishing media

Suitable

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

: None known.

Special exposure hazards

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products : Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/oxides

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

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods for cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

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7. Handling and storage

Storage

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls/personal protection

| Ingredient | Exposure limits | |
|------------------|---|--|
| sodium hydroxide | ACGIH TLV (United States, 3/2012). C: 2 mg/m³ NIOSH REL (United States, 6/2009). CEIL: 2 mg/m³ OSHA PEL (United States, 6/2010). TWA: 2 mg/m³ 8 hours. OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m³ | |

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Engineering measures

: If user operations generate dust, fumes, gas, 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.

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protection

Respiratory

: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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.

Hands

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eyes

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

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9. Physical and chemical properties

Physical state : Liquid.

Flash point : Closed cup: >100°C (>212°F)

Auto-ignition temperature : 365°C (689°F)

Color : Colorless to light yellow.

Odor : Characteristic.

pH : 13,5

Boiling/condensation point : 100°C (212°F)

Melting/freezing point : 0°C (32°F)

Relative density : 1,085

10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : No specific data.

Incompatible materials: Reactive or incompatible with the following materials:

acids

Hazardous decomposition

products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

Possibility of hazardous

reactions

: Under normal conditions of storage and use, hazardous reactions will not occur.

11. Toxicological information

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|-----------|---------|------------|----------|
| Carbonic acid sodium salt (1: 2) | LD50 Oral | Rat | 4090 mg/kg | - |
| glycine, n,n-bis (carboxymethyl)-, trisodium salt | LD50 Oral | Rat | 1100 mg/kg | - |

Conclusion/Summary

: Not available.

Chronic toxicity

Conclusion/Summary

: Not available.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|----------------------------------|--------------------------|---------|-------|----------------------------------|-------------|
| Carbonic acid sodium salt (1: 2) | Eyes - Mild irritant | Rabbit | - | 0,5 minutes 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Eyes - Severe irritant | Rabbit | _ | 50 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| sodium hydroxide | Eyes - Severe irritant | Monkey | - | 24 hours 1 Percent | - |
| | Eyes - Mild irritant | Rabbit | - | 400 Micrograms | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 50 Micrograms | - |
| | Eyes - Severe irritant | Rabbit | _ | 1 Percent | _ |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 1 milligrams | - |

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11. Toxicological information

| | Eyes - Severe irritant | Rabbit | - | 0,5 minutes 1 | - |
|--|------------------------|--------|---|---------------|---|
| | | | | milligrams | |
| | Skin - Mild irritant | Human | - | 24 hours 2 | - |
| | | | | Percent | |
| | Skin - Severe irritant | Rabbit | - | 24 hours 500 | - |
| | | | | milligrams | |

Conclusion/Summary

: Not available.

Sensitizer

Conclusion/Summary

: Not available.

Carcinogenicity

Conclusion/Summary : |

: Not available.

Classification

| Product/ingredient name | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|---|-------|------|-----|-------|-----|------|
| glycine, n,n-bis (carboxymethyl)-, trisodium salt | - | 2B | - | - | - | - |

Mutagenicity

Conclusion/Summary

: Not available.

Teratogenicity

Conclusion/Summary

: Not available.

Reproductive toxicity

Conclusion/Summary: Not available.

12. Ecological information

Ecotoxicity : Readily biodegradable

Aquatic ecotoxicity

| Product/ingredient name | Result | Species | Exposure |
|----------------------------------|------------------------------------|--|----------|
| Carbonic acid sodium salt (1: 2) | Acute EC50 242000 μg/l Fresh water | Algae - Navicula seminulum | 96 hours |
| , | Acute LC50 176000 µg/l Fresh water | Crustaceans - Amphipoda | 48 hours |
| | Acute LC50 265000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 300000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| glycine, n,n-bis | Acute LC50 560000 to 1000000 µg/l | Daphnia - Daphnia magna | 48 hours |
| (carboxymethyl)-, trisodium salt | Fresh water | | |
| | Acute LC50 252000 µg/l Fresh water | Fish - Lepomis macrochirus | 96 hours |
| sodium hydroxide | Acute EC50 40,38 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute LC50 125000 μg/l Fresh water | Fish - Gambusia affinis - Adult | 96 hours |

Conclusion/Summary

: Readily biodegradable

Persistence/degradability

Conclusion/Summary: Readily biodegradable

Other adverse effects : No known significant effects or critical hazards.

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13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. 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 local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|--------------------------|----------------|----------------------|---------|-----|-------|------------------------|
| DOT Classification | Not regulated. | - | - | - | | - |
| TDG Classification | Not regulated. | - | - | - | | - |
| Mexico Classification | Not regulated. | - | - | - | | - |
| ADR/RID Class | Not regulated. | - | - | - | | - |
| IMDG Class | Not regulated. | - | - | - | | - |
| IATA-DGR Class | Not regulated. | - | - | - | | - |

PG*: Packing group

15. Regulatory information

HCS Classification

: Irritating material Carcinogen

Target organ effects

U.S. Federal regulations

: TSCA 8(a) IUR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): All components are listed or exempted.

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: Carbonic acid sodium salt (1:2);

sodium hydroxide

SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Carbonic acid sodium salt (1:2): Immediate (acute) health hazard, Delayed (chronic)

health hazard; sodium hydroxide: Immediate (acute) health hazard

Clean Water Act (CWA) 311: sodium hydroxide

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15. Regulatory information

Clean Air Act Section 112 : Not listed

(b) Hazardous Air **Pollutants (HAPs)**

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

Class II Substances

DEA List I Chemicals

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

State regulations

Massachusetts : The following components are listed: SODIUM HYDROXIDE

New York : The following components are listed: Sodium hydroxide

New Jersey : The following components are listed: SODIUM HYDROXIDE; CAUSTIC SODA

The following components are listed: SODIUM HYDROXIDE (NA(OH)) **Pennsylvania**

Canada inventory : All components are listed or exempted.

International regulations

International lists : Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: Not determined.

Korea inventory: All components are listed or exempted. Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): All components are listed or exempted.

Taiwan inventory (CSNN): Not determined.

Chemical Weapons

Convention List Schedule

I Chemicals

Chemical Weapons

Convention List Schedule

II Chemicals

: Not listed

: Not listed

Chemical Weapons Convention List Schedule

III Chemicals

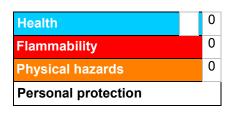
: Not listed

16. Other information

Label requirements

CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

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



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16. Other information

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

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



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Date of printing : 15-1-2013.

□ate of issue : 15-1-2013.

Date of previous issue : No previous validation.

Version : 1

Prepared by : Not available.

Indicates information that has changed from previously issued version.

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.

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