HPCS Historic Plaster Conservation Services
Applied Science

GR Non-Shrink
Premium Plain Face Plaster Grout

Gr GROUT ™

Section 1: Product and Company Identification

Historic Plaster Conservation Services
26 Barrett Street
Port Hope, Ontario. L1A 1M7
Business: (905) 885-8764
FAX: (905) 885-8330
info@HistoricPlaster.com

Product Name: GR Non-Shrink
Product Description: Premium Crack and Void Filler
Generic Name: Filled acrylic resin mixture

Date of Revision: 30 November 2012

Section 2: Hazard Identification

Emergency Overview: White milky viscous liquid and fine black powder separately in cartridge. Irritating to eyes, skin and respiratory system. May be harmful if ingested, inhaled or absorbed through skin. Use with adequate ventilation.

HMIS HEALTH	**1**
HMIS FLAMMABILITY	**0**
HMIS REACTIVITY	**0**
PERSONAL PROTECTION	**C**

OSHA Regulatory Status: This material **is** considered hazardous under the OSHA standard.
WHMIS Classification: E

Potential Health Effects:
Inhalation: Ammonia fumes from liquid portion may be irritating to eyes and respiratory tract. Petroleum coke can be irritating if dust is inhaled.
Ingestion: Causes digestive system irritation with pain, nausea, vomiting and shock.
Skin Contact: May cause irritation.
Eye Contact: Can cause irritation, redness and tearing. Solids in white liquid or separate black solids can cause abrasion of the cornea and other mechanical eye injury.
Chronic Exposure: Prolonged or repeated inhalation of dust from petroleum coke solids may cause lung scarring.
Aggravation of Pre-existing Conditions: No information found.
Target Organs: Eyes, skin, respiratory system

Section 3: Composition / Information On Ingredients

Component	Common Names, Synonyms	CAS #	EINECS	Weight %
Ammonium hydroxide	Aqua ammonia	1336-21-6	215-647-6	< 1
Petroleum coke		64741-79-3	265-080-3	15 - 40

Non-hazardous components may or may not be listed. Carcinogens are listed when present at 0.1% or more; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or more. This is not intended to be complete compositional disclosure. See Section 15 for applicable states right to know and other regulatory information.

Section 4: First Aid Measures

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
Ingestion: DO NOT induce vomiting. Dilute material by giving several glasses of water or milk. Never give anything by mouth to an unconscious person. Get medical attention immediately.
Skin: Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops.
Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.
Note to Physicians: N/A

Section 5: Fire Fighting Measures

Fire: Flash point: Not flammable. Once water has evaporated, product can provide fuel for a fire.
Explosion: Not considered an explosion hazard. Coke dust is not considered an explosion hazard.
Extinguishing Media: Water spray, dry chemical, alcohol foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.
Special Precautions: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.
NFPA Rating: Health -1 Flammability - 0 Reactivity - 0 Other – NA

Section 6: Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Scrape or push material onto cardboard surface of sufficient size to hold spill. Mixed resin will solidify within hours or days. Solidified material can be disposed of in a sanitary landfill or with ordinary household trash. Make sure that disposal is performed in compliance with federal and local laws.

Section 7: Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Separate from incompatibles, combustibles, organic or other readily oxidizable materials. Containers of this material may be hazardous when empty since they retain product residues (liquid, vapors); observe all warnings and precautions listed for the product.

Section 8: Exposure Control / Personal Protection

Exposure Guidelines:

Component	CAS #	OSHA PEL	ACGIH TLV	NIOSH TLV
Ammonium hydroxide	1336-21-6	50 ppm	25 ppm TWA 35 ppm STEL	25 ppm TWA 35 ppm STEL

Petroleum coke	64741-79-3	15 mg/m^3 5 mg/m^3 respirable	10 mg/m^3 3 mg/m^3 respirable	15 mg/m^3 5 mg/m^3 respirable

Personal Protective Equipment:
Skin Contact: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Nitrile and NBR gloves are recommended.
Eye Contact: Use chemical safety goggles and/or full face shield where misting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.
Inhalation: Use NIOSH-approved vapor respirator if exposure is unknown or exceeds permissible limits. A respiratory protection program that meets OSHA's 29 CFR 1910.134 or ANSI Z88.2 requirements must be followed whenever workplace conditions warrant respirator use. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Section 9: Physical and Chemical Properties			
Appearance	White milky liquid and black granular solid	Specific Gravity (g/mL)	1.2 – 1.3
Odor	Ammonia	pH	Not determined
Odor Threshold	Not determined	Solubility in water	Partly
Melting Point	Not determined	% Volatiles	<1%
Boiling Point	Not determined	Evaporation Rate	Not determined
Flash Point	Not flammable	Vapor Pressure	Not determined
VOC as component	0 g/L	VOC as applied	0 g/L

Section 10: Stability and Reactivity

Chemical Stability: This product is stable in closed containers at room temperature.
Hazardous Decomposition Products: Carbon oxides (CO, CO_2), nitrogen oxides (NO, NO_2, N_2O), hydrogen cyanide, isocyanates, acrylic monomers, organic acids and aldehydes.
Hazardous Polymerization: Will not occur.
Incompatibilities: Strong acids, oxidizers, heat
Conditions to Avoid: Incompatible materials, combustible materials.

Section 11: Toxicological Information

Acute Dose Effects: **Eyes**: Calcium hydroxide: Draize test, Rabbit, eye: 10 mg, Severe
Skin: Petroleum coke was found to be non-carcinogenic in mice in chronic skin painting studies with coke dust.
Oral: No information found.
Inhalation: Petroleum coke was found to be non- carcinogenic in rats and monkeys in a two-year inhalation study at concentrations up to 30 mg/m^3

Section 12: Ecological Information

Environmental Fate: This product is not expected to bioaccumulate. This product is not readily biodegradable.

Ecotoxicity: No information found.

Section 13: Disposal Considerations

As a waste, this material IS NOT considered a HAZARDOUS WASTE.
Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

Section 14: Transport Information

Canadian TDG	**Proper Shipping Name**: Not regulated for transport **DOT Hazard Class**: N/A **UN Number**: N/A **Packing Group**: N/A
International Air	**Proper Shipping Name**: Not regulated for transport **DOT Hazard Class**: N/A **UN Number**: N/A **Packing Group**: N/A
U.S. Domestic Ground	**Proper Shipping Name**: Not regulated for transport **DOT Hazard Class**: N/A **UN Number**: N/A **Packing Group**: N/A
U.S. Domestic Air	**Proper Shipping Name**: Not regulated for transport **DOT Hazard Class**: N/A **UN Number**: N/A **Packing Group**: N/A

This data provided for information only. The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate regulations to properly classify your shipment for transportation.

Section 15: Regulatory Information

TSCA Chemical Inventory: All of the chemicals in this product are listed on the TSCA Inventory.
TSCA Sec 4 Chemical Test Rule: None of the chemicals in this product are under a Chemical Test Rule.
TSCA Sec 8(d): None of the chemicals in this product are on the Health and Safety Reporting List.
TSCA Sec 12(b) Notices of Export: None of the chemicals in this product are on this list.
TSCA Significant New Use Rule (SNUR): None of the chemicals in this product are on this list.
SARA Sec 302 (EHS) TPQ: None of the chemicals in this product have a TPQ.
SARA Sec 302 (EHS) RQ: None of the chemicals in this product have a RQ.
SARA Sec 311/312: Acute – YES; Chronic – YES; Fire – NO; Release of Pressure – NO; Reactivity – NO
SARA 313 List: None of the chemicals in this product are on this list.

CERCLA Hazardous Substances and corresponding RQs: Ammonium hydroxide: 1000 lbs; this product: 100,000 lbs.
RCRA: None of the chemicals in this product are on this list.
Clean Air Act: **Hazardous Air Pollutants?** NO **Class 1 Ozone Depletors?** NO **Class 2 Ozone Depletors?** NO
Clean Water Act: **Hazardous Substance?** NO **Priority Pollutant?** NO **Toxic Pollutant?** NO
Chemical Weapons Convention: None of the chemicals in this product are on this list.
Drug Enforcement Agency (DEA) CDTA: None of the chemicals in this product are on this list.
OSHA: None of the chemicals in this product are considered Highly Hazardous by OSHA.
State Right-to-Know Lists: Ammonia is found on the Right-to-Know lists of Illinois, New Jersey, Pennsylvania and Massachusetts.
California Proposition 65: None of the chemicals in this product are on this list.
Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations. The components in this product are listed, or exempt from listing, on the Canadian Domestic Substances List.
WHMIS Classification: E
Canada Ingredient Disclosure List: Ammonium hydroxide (CAS# 1336-21-6) is listed on the Ingredient Disclosure List.

Section 16: Other Information

Abbreviations and acronyms used:

ACGIH	American Conference of Governmental Industrial Hygienists
ANSI	American National Standards Institute
atm	atmosphere (pressure unit)
BOD	biological oxygen demand
CAS	Chemical Abstracts Service
CC	closed cup
CDTA	Chemical Drug and Trafficking Act
COC	Cleveland Open Cup
COD	chemical oxygen demand
CFR	Code of Federal Regulations
CPR	cardio-pulmonary resuscitation
DEA	Drug Enforcement Agency
DOT	Department of Transportation
EINECS	European Inventory of Existing Commercial Chemical Substances
FDA	Food and Drug Administration
IARC	International Agency for Research on Cancer
IDLH	immediate danger to life and health
kg	kilogram
L	liter
LC50	median lethal concentration
LD50	median lethal dose
LEL	lower explosive limit
mg	milligram
mL	milliliter
NIOSH	National Institute for Occupational Safety and Health
ND	not determined
NFPA	National Fire Prevention Association
NTP	National Toxicology Program
OC	open cup
OSHA	Occupational Safety and Health Administration
Part	partition
PEL	permissible exposure limits
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
psi	pounds per square inch
RCRA	Resource Conservation and Recovery Act
RQ	Reportable quantity
RTK	Right to Know
SARA	Superfund Amendments and Reauthorization Act
STEL	short-term exposure limit
TCC	Tagliabue Closed Cup
TDG	Transportation of Dangerous Goods
TPQ	threshold planning quantity
TQ	threshold quantity
TSCA	Toxic Substances Control Act
TWA	time-weighted average
UEL	upper explosive limit
WHMIS	Workplace Hazardous Information System

This document was prepared in accordance with 29 CFR 1910.1200, Canadian CPR and ANSI Z400.1-2004.

Prepared by Douglas R. Chrisope on 30 November 2012.

DISCLAIMER: Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving this MSDS will make their own determination as to its suitability for their intended purposes prior to use. Since the product is within the exclusive control of the user, it is the user's obligation to determine the conditions of safe use of this product. Such conditions should comply with all Federal Regulations concerning the Product. It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and

shall not establish a legally valid contractual relationship. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS.

****

THIS IS THE LAST PAGE OF THIS MSDS

****