

Material Safety Data Sheet

Revision Issued: 11/10/2008 Supercedes: 5/13/1999 First Issued: 6/05/89

Section I - Chemical Product And Company Identification

Product Name: Oxy Patch Kit

CAS Number: N/A

HBCC MSDS No. CD02500B



HILL BROTHERS *Chemical Co.*

1675 NORTHMAIN STREET • ORANGE, CALIFORNIA 92867-3499
(714)998-8800 • FAX: (714)998-6310
<http://hillbrothers.com>

1675 No. Main Street, Orange, California 92867
Telephone No: 714-998-8800 | Outside Calif: 800-821-7234 | Chemtrec: 800-424-9300

Section II - Composition/Information On Ingredients

Chemical Name	CAS Number	Exposure Limits (TWAs) in Air		
		ACGIH TLV	OSHA PEL	STEL
Calcium Carbonate	471-34-1	N/A	N/A	N/A
Magnesium Oxide	1309-48-4	5 mg/m ³	5 mg/m ³	N/A
Magnesium Silicate Hydrate (non-fibrous or non-asbestos talc)	14807-96-6	2 mg/m ³	2 mg/m ³	N/A
Silicone Dioxide (Respirable)	14808-60-7	0.1 mg/m ³	10 mg/m ³	N/A
Silicone Dioxide (Dust)	14808-60-7	0.1 mg/m ³	30 mg/m ³	N/A

Section III - Hazard Identification

Routes of Exposure: Inhalation, skin, eyes

Summary of Acute Health Hazards

Ingestion: May be harmful if swallowed.

Inhalation: May dehydrate mucous membrane. Crystalline silica can cause silicosis, a progressive and frequently incapacitating pneumoconiosis evident on x-ray and in pulmonary function testing, as well as in subjective respiratory complaints.

Skin: May cause irritation of the skin.

Eyes: May cause irritation of the eyes.

Carcinogenicity Lists: No **NTP:** No **IARC Monograph:** No **OSHA Regulated:** No

Summary of Chronic Health Hazards: N/A

Signs and Symptoms of Exposure: Undue breathlessness, wheezing, cough, and sputum production.

Effects of Overexposure: May dehydrate mucous membrane. Crystalline silica can cause silicosis, a progressive and frequently incapacitating pneumoconiosis evident on x-ray and in pulmonary function testing, as well as in subjective respiratory complaints.

Medical Conditions Generally Aggravated by Exposure: Pulmonary function

may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure.

Note to Physicians: N/A

Section IV - First Aid Measures

Ingestion: N/A

Inhalation: If a person breathes in large amounts of this chemical, move the exposed person to fresh air at once, administer artificial respiration as needed. OBTAIN MEDICAL ATTENTION.

Skin: Wash dust from skin thoroughly with soap and water.

Eyes: While holding eyelids open, flush with plenty of water for at least 15 minutes. If irritation persists, OBTAIN MEDICAL ATTENTION.

Section V - Fire Fighting Measures

Flash Point: N/A

Autoignition Temperature: N/A

Lower Explosive Limit: N/A

Upper Explosive Limit: N/A

Unusual Fire and Explosion Hazards: N/A

Extinguishing Media: This material is non-combustible. Use extinguishing media appropriate to the surrounding area.

Special Firefighting Procedures: None

Section VI - Accidental Release Measures

If material is not contaminated, place into clean containers for use. If contaminated, place into containers for disposal.

Section VII - Handling and Storage

Product should be stored in warehouse with sprinklers. Keep temperatures below 60°C; 140°F for quality. This product may react with hot or concentrated nitric and perchloric acids, fuming sulfuric acid at 60°C; 140°F or above, and should not be stored near such materials.

Section VIII - Exposure Controls/Personal Protection

Respiratory Protection: Only NIOSH-approved or MSHA-approved equipment should be used.

Respiratory Protection For Crystalline Silica Minimum Respiratory Protection

Particulate Concentration:

5 x PEL or less: Any dust respirator.

10 x PEL or less: One of the following respirators can be used:

- Dust respirator, except single-use or quarter-mask respirator
- Supplied-air respirator
- Self-contained breathing apparatus

50 x PEL or less: One of the following respirators can be used:

- A high efficiency particulate filter respirator with a full facepiece
- Supplied-air respirator with a full facepiece, helmet, or hood
- Self-contained breathing apparatus with a full facepiece

500 x PEL or less: One of the following respirators can be used:

- A Powered air-purifying respirator with a high efficiency particulate filter
- A Type C supplied-air respirator operated in pressure-demand or other positive pressure or continuous-flow mode

Greater than 500 x PEL or entry and escape from unknown concentrations:

One of the following respirators can be used:

- Self-contained breathing apparatus with a full facepiece operated in pressure-demand or other positive pressure mode
- A combination respirator which includes a Type C supplied-air respirator with a full facepiece operated in pressure-demand or other positive pressure continuous-flow mode and an auxiliary self-contained breathing apparatus operated in pressure-demand or other positive pressure mode.

Abrasive Blasting: Any Type CE, supplied-air respirator with a full facepiece, hood, or helmet, operated in a positive-pressure mode. Only NIOSH-approved or MSHA-approved equipment should be used.

Ventilation: Provide adequate ventilation

Protective Clothing: N/A

Eye Protection: Tight fitting goggles for dust only should be worn.

Other Protective Clothing or Equipment: N/A

Work/Hygienic Practices: Keep dust and air concentration to minimum. Vacuum to remove collected dust and prevent formation of dust clouds. Avoid inhalation of dust, and contact with eyes and skin. Do NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.

Section IX - Physical and Chemical Properties

Physical State: Solid, powder

pH: N/A

Melting Point/Range: N/A

Boiling Point/Range: N/A

Appearance/Color/Odor: Tan; no odor

Solubility in Water: Negligible

Vapor Pressure(mmHg): N/A

Specific Gravity(Water=1): 1.87-1.91

Molecular Weight: N/A

Vapor Density(Air=1): N/A

% Volatiles: N/A

How to detect this compound : N/A

Section X - Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Avoid dampness. Hydrates materials. Some decomposition occurs above 6000°C liberating CO₂.

Materials to Avoid: Strong Acids

Hazardous Decomposition Products: None - combination with water generates some heat.

Section XI - Toxicological Information

N/A

Section XII - Ecological Information

N/A

Section XIII - Disposal Considerations

Consult Federal, State, or Local Authorities for proper disposal procedures. Non-Biodegradable solid waste should be taken to a licensed landfill facility.

Section XIV - Transport Information

DOT Proper Shipping Name: N/A

DOT Hazard Class/ I.D. No.: N/A

Section XV - Regulatory Information

WARNING

This product contains Crystalline Silica, a substance known to the State of California to cause cancer.

Reportable Quantity: N/A

NFPA Rating: Health - 1; Flammability - 0; Instability - 0

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Carcinogenicity Lists: NTP: No **IARC Monograph:** No **OSHA Regulated:** No

Section XVI - Other Information

Synonyms/Common Names: Magnesium Oxychloride Cement

Chemical Family/Type: N/A

Sections Changed since last revision: VIII, IX

IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure. This MSDS has been prepared according to the OSHA Hazard Communication Standard [29 CFR 1910.1200]. The MSDS information is based on sources believed to be reliable. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use, or misuse are beyond our control, **Hill Brothers Chemical Company** makes no warranty, either expressed or implied, with respect to the completeness or continuing accuracy of the information contained herein and disclaims all liability for reliance thereon. Also, additional information may be necessary or helpful for specific conditions and circumstances of use. It is the user's responsibility to determine the suitability of this product and to evaluate risks prior to use, and then to exercise appropriate precautions for protection of employees and others.

Material Safety Data Sheet

Revision Issued: 11/10/2008 Supersedes: 5/12/1999 First Issued: 4/10/1987

Section I - Chemical Product And Company Identification

Product Name: Gauging Solution

CAS Number: 7786-30-3

HBCC MSDS No. CD02500H



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1675 NORTHMAIN STREET • ORANGE, CALIFORNIA 92867-3499
(714) 998-8800 • FAX: (714) 998-6310
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1675 No. Main Street, Orange, California 92867
Telephone No: 714-998-8800 | Outside Calif: 800-821-7234
Chemtrec: 800-424-9300

Section II - Composition/Information On Ingredients

Chemical Name	CAS Number	%	Exposure Limits (TWAs) in Air		
			ACGIH TLV	OSHA PEL	STEL
Magnesium Chloride	7786-30-3	24	N/A	N/A	N/A

Section III - Hazard Identification

Summary of Acute Health Hazards

Ingestion: Possible nausea and vomiting. Ingestion of large amounts (greater than 0.1 pound) can cause gastrointestinal upset and irritation of the stomach.

Inhalation: Dust may be irritating, but not likely to cause injury.

Skin: May cause minor irritation.

Eyes: Slight irritation and may cause minor transient corneal injury.

Summary of Chronic Health Hazards: N/A

Summary of Toxic Effects: N/A

Section IV - First Aid Measures

Ingestion: Unlikely. Should this type of exposure occur, and large quantities of magnesium chloride are accidentally ingested, give the person 2 to 3 glasses of water to drink and induce vomiting. Repeat. If only small quantities have been ingested, dilute material with 1 to 2 glasses of water and do not induce vomiting. GET MEDICAL ATTENTION.

Inhalation: Remove to fresh air. GET MEDICAL ATTENTION.

Skin: Wash off in flowing water or shower for 15-20 minutes.

Eyes: Irrigate with large amounts of water continuously for 15 minutes. GET MEDICAL ATTENTION.

Medical Conditions Generally Aggravated by Exposure: Possible skin irritation to sensitive individuals.

Note to Physicians: The severity of ingestion exposure to magnesium chloride can

be estimated by measuring the amount of magnesium in the blood, assuming that the affected worker was not exposed to other magnesium products.

Section V - Fire Fighting Measures

Flash Point: Non-Flammable

Autoignition Temperature: N/A

Lower Explosive Limit: N/A

Upper Explosive Limit: N/A

Unusual Fire and Explosion Hazards: N/A

Extinguishing Media: Magnesium chloride is a stable, simple, inorganic salt that will not burn. Use extinguishing agents that will put out the surrounding fire.

Special Firefighting Procedures: May use a self-contained breathing apparatus if temperature exceeds 572°F.

Section VI - Accidental Release Measures

No special precautions. Sweep up and return to container. Contain spills to prevent contamination of water supply or sanitary sewer system. Dispose of large amounts in accordance with applicable local, county, state and federal regulations.

Section VII - Handling and Storage

Practice reasonable care and caution. Avoid breathing dust if generated. Material is deliquescent, so may cake with long term storage. This is only a detriment to handling of the material - No Hazard Entailed.

Other Precautions: Incompatible with sulfuric and nitric acids, caustics, ammonia, and cyanides.

Section VIII - Exposure Controls/Personal Protection

Respiratory Protection: An approved dust respirator is recommended.

Ventilation: Provide adequate ventilation.

Protective Clothing: N/A

Eye Protection: Safety glasses

Other Protective Clothing or Equipment: N/A

Work/Hygienic Practices: Wash hands thoroughly after handling, and before eating, drinking, or smoking. DO NOT place food, coffee or other drinks in the area where dusting or splashing of solutions is possible.

Section IX - Physical and Chemical Properties

Physical State: Liquid

pH: 6 - 8

Melting Point/Range: N/A

Boiling Point/Range: 290°F;
143°C

Appearance/Color/Odor: Colorless to amber liquid. Material is odorless.

Solubility in Water: 38% at 120°F; 49°C, 45% at 290°F; 143°C

Vapor Pressure: 0.5 psia at 100°F

Specific Gravity(Water= 1): Approximately 2.3

Molecular Weight: N/A

Product Name: Oxy Patch Kit and Gauging Solution

6 of 8

Vapor Density(Air=1): N/A

% Volatiles: N/A

Odor Threshold: N/A

Freezing Point: N/A

How to detect this compound : N/A

Section X - Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid: Solutions can be aggressively corrosive.

Materials to Avoid: Metals will experience slight corrosion over time. Incompatible with sulfuric and nitric acids, caustics, ammonia, and cyanides. A hazardous reaction involving magnesium chloride and 2-furan percarboxylic acid has been reported.

Hazardous Decomposition Products: Slow heating may release free chlorine gas above 572°F. Avoid contact with strong acids, as chlorine gas may evolve. Under normal applications, decomposition should not occur.

Section XI - Toxicological Information

N/A

Section XII - Ecological Information

N/A

Section XIII - Disposal Considerations

Wash residue away with large excess of water. Dispose of large amounts in accordance with applicable local, county, state and federal regulations.

Section XIV - Transport Information

DOT Proper Shipping Name: N/A

DOT Hazard Class/ I.D. No.: N/A

Section XV - Regulatory Information

NFPA Rating: Health - 1; Flammability - 0; Instability - 0
0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

Carcinogenicity Lists: NTP: No IARC Monograph: No OSHA Regulated: No

Section XVI - Other Information

Synonyms/Common Names: N/A

Chemical Family/Type: Magnesium Chloride Hexahydrate, Magnesium Chloride Brine

Sections revised since last revision: I-V, VIII, X, XVI

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