

Calcium, Lime & Spot Remover



Current revision 06/30/17

SECTION 1 — CHEMICAL PRODUCT AND COMPANY INFORMATION	
TMP Inc. / 1395 South Marietta Parkway SE. Bldg. 200, Suite 222 Marietta, GA. 30067	Telephone: (770) 447-0061 Fax: (770) 447-0063 Chemtrec: (800) 424-9300
Product Identifier Code # (PIF): 543355	
Product Name:	Calcium, Lime & Spot Remover
Product Use:	Clean Tile and Glass
Restrictions on Sale:	None
Physical Form:	Liquid (clear)
Color:	Colorless to pale amber
Odor:	Not available

SECTION 2 — HAZARDS IDENTIFICATION

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200)

GHS Hazard Codification:



Signal Word: WARNING

Hazard Class	Category	Hazard Statement
Eye Irritation	2A	Causes serious eye irritation
Acute Toxicity	4	Harmful if swallowed

Precautionary	Statement
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye or face protection.
Response	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF SWALLOWED: Call a poison center or doctor/physician if you feel unwell. Rinse mouth.

Hazards Not Otherwise Classified: None Known

SECTION 3 — COMPOSITION/ INFORMATION ON INGREDIENTS		
Ingredient	CAS #	% by Weight
Organic salt	(Confidential)	5 - 30%
The chemical identity and exact percentage of the composition has been withheld as it is a trade secret. There are no additional ingredients present which, within the current knowledge of the supplier and in concentrations applicable, are classified as hazardous to health and hence require reporting in this section.		

SECTION 4 — FIRST AID MEASURES	
<u>Eye Contact:</u>	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
<u>Inhalation:</u>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
<u>Skin Contact:</u>	Flush contaminated skin with plenty of water. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<u>Ingestion:</u>	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest for comfortable breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband

Most important Symptoms/Effects, Acute and Delayed Potential Acute Health Effects:

<u>Eye Contact:</u>	Causes serious eye irritation
<u>Inhalation:</u>	Exposure to decomposition products may cause a health hazard.
<u>Skin Contact:</u>	May cause mild skin irritation
<u>Ingestion:</u>	Harmful if swallowed. Irritating to mouth, throat and stomach.

Over Exposure Signs/Symptoms:

<u>Eye Contact:</u>	Adverse symptoms may include the following: Pain or irritation, Watering, Redness
<u>Inhalation:</u>	No known significant effects or critical hazards
<u>Skin Contact:</u>	Adverse symptoms may include the following: Irritation, Redness
<u>Ingestion:</u>	Harmful if swallowed. Irritating to mouth, throat and stomach.

Indication of Immediate Medical Attention and Special treatment needed, if Necessary:

<u>Notes to Physician:</u>	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.
<u>Specific treatments:</u>	No specific treatment
<u>Protection of First Aiders:</u>	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.

SECTION 5 — FIRE FIGHTING MEASURES

<u>Fire and Explosion Hazard:</u>	Not available
-----------------------------------	---------------

<u>Suitable Extinguishing Media:</u>	Use an extinguishing agent suitable for the surrounding fire.
<u>Unsuitable Extinguishing Media:</u>	None known
<u>Hazardous Thermal Decomposition Products:</u>	Decomposition products may include following materials: carbon dioxide, carbon monoxide, nitrogen oxides
<u>Specific Hazards During Firefighting:</u>	Heating above 110°C results in an exothermic decomposition with release of CO ₂ gas.
<u>Special Protective Actions for Firefighters:</u>	No special measures are required.
<u>Special Protective Equipment for Firefighters:</u>	Fire Fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face piece operated in positive pressure mode.
<u>Further Hazard/Disposal Information for Firefighters:</u>	Not available

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

<u>For Non-Emergency Personnel:</u>	No action shall be taken involving any personal risk or without suitable training. 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.
<u>For Emergency Responders:</u>	If specialized clothing is required to deal with the spillage, take note of any information in SECTION 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency Personnel".
<u>Environmental Precautions:</u>	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).
<u>Methods and Materials for Containment and Cleaning Up Spill:</u>	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 or 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.

SECTION 7 — HANDLING AND STORAGE	
<u>Safe Handling Conditions:</u>	Put on appropriate personal protective equipment (see SECTION 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in original container or an approved alternative made from compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
<u>General Occupational Hygiene:</u>	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. See also SECTION 8 for additional information on hygiene measures.
<u>Safe Storage Conditions:</u>	Keep out of the reach of children. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool well-ventilated area, away from incompatible materials (see SECTION 10) and food and drink. Keep container tightly closed and sealed until ready for use. Do not store in unlabeled containers. Store upright to prevent leakage.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION	
<u>Occupational Exposer Limits:</u>	None

Engineering Controls:

<u>Personal Protective Equipment:</u>	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
<u>Environmental Exposure Controls:</u>	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Individual Protection Measures:
<u>Hygiene Measures:</u>	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.
<u>Respiratory Protection:</u>	Use a properly fitted, air-purifying or supplied air 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.
<u>Eye/Face Protection:</u>	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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Tightly fitting safety goggles.
<u>Hand Protection:</u>	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 case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
<u>Skin and Body Protection</u>	Personal protective equipment for the body should be selected based on the task being performed and the risks involved should be approved by a specialist before handling this product.

<u>Other Skin Protection:</u>	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
-------------------------------	---

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state)	Liquid (Clear)	Upper/Lower Explosive (flammable) limits	Not available
Color	Colorless to pale amber	Specific gravity (water – 1.0)	Not available
Odor	Not available	Vapor Pressure	<0.013kPa (0.1mmHg) room temperature
Odor threshold	Not available	Vapor density (Air = 1)	>1
pH	<1 (as is)	Relative Density	1.04
Melting point	Not determined	Solubility	Easily soluble in water
Freezing point	Not determined	Partition coefficient (n-octanol/water)	Not available
Boiling point	100°C (212°F)	Auto-ignition temperature	Not available
Flash point	>93.3°C (>200°F)	Decomposition temperature	Not determined
Evaporation rate (n-butyl acetate=1)	>1	Viscosity	200cP
Flammability (solid, gas)	Not available	%Volatile/Volume	Not available

SECTION 10 — STABILITY AND REACTIVITY

<u>Reactivity:</u>	No specific test data related to reactivity available for this product or its ingredients.
<u>Chemical Stability:</u>	Product is stable.
<u>Possibility Of Hazardous Reactions:</u>	Under normal conditions of storage and use, hazardous reactions will not occur.
<u>Conditions to Avoid:</u>	No specific data.
<u>Incompatible Materials:</u>	Reactive or incompatible with the following materials: oxidizing materials. This material may be extremely hazardous in contact with chlorates and nitrates. Contact with hypo-chlorites (e.g. Chlorine bleach) sulfides or cyanides will liberate toxic gases. Contact with alkaline materials (e.g. Aqua ammonia) will generate heat. High concentrations of this material will react vigorously with carbonate scales which may carry vapor and so care must be taken to avoid inhalation.
<u>Hazardous Decomposition Products:</u>	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11 — TOXICOLOGICAL INFORMATION

Ingredient name	Result	Species	Dose	Exposure
Organic acid salt	LDSO Oral	Rat	1357mg/kg	
	LDSO Dermal	Rat	3698 mg/kg	

Acute Toxicity:

<u>Acute Oral Toxicity:</u>	No data available
<u>Irritation / Corrosion:</u>	Not a skin irritant.
<u>Sensitization:</u>	No data available
<u>Carcinogenicity:</u>	No components are listed as carcinogens by IARC, ACGIH, OSHA or NTP above the threshold of 0.1%
<u>Specific Target Organ Toxicity (Single Exposure):</u>	No data available
<u>Specific Target Organ Toxicity (Repeated Exposure):</u>	No data available
<u>Aspiration Hazard:</u>	No data available

Primary Routes of Entry:	<u>Eye:</u>	<u>Skin:</u>	<u>Inhalation:</u>	<u>Ingestion:</u>
	Yes	Yes	Yes	Yes

Potential Acute Health Effects:

<u>Inhalation:</u>	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
<u>Ingestion:</u>	Harmful if swallowed. Irritating to mouth, throat and stomach.
<u>Skin:</u>	May cause mild irritation.
<u>Eyes:</u>	Causes serious eye irritation.

Symptoms Related to the Physical, Chemical and Toxicological Characteristic:

<u>Inhalation:</u>	No known significant effects or critical hazards
<u>Ingestion:</u>	Harmful if swallowed. May be Irritating to mouth, throat and stomach
<u>Skin Contact:</u>	Adverse symptoms may include following: Irritation Redness
<u>Eye Contact:</u>	Adverse symptoms may include the following: Pain or irritation, Watering, Redness

Delayed and Immediate Effects and Also Chronic Effects from Short and Long Term Exposure:

<u>Short Term Exposure:</u>	Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards.
<u>Long Term Exposure:</u>	Potential immediate effects: No known significant effects or critical hazards. Potential delayed effects: No known significant effects or critical hazards.

Potential Chronic Health Effects

<u>General:</u>	No known significant effects or critical hazards.
<u>Carcinogenicity:</u>	No known significant effects or critical hazards.
<u>Mutagenicity:</u>	No known significant effects or critical hazards.
<u>Teratogenicity:</u>	No known significant effects or critical hazards.
<u>Developmental Effects:</u>	No known significant effects or critical hazards.
<u>Fertility Effects:</u>	No known significant effects or critical hazards.

SECTION 12 — ECOLOGICAL INFORMATION

<u>Ingredient name</u>	<u>Result</u>	<u>Species</u>	<u>Exposure</u>
Organic acid salt	LC50 709mg/kg	Daphnia Magna	48 Hour
	LC50 21.5 mg/L	Selenastrum Capricornutum	72 Hour
	LC50 >100mg/L	Rainbow Trout	96 Hour

<u>Ecotoxicity (Aquatic and Terrestrial):</u>	No data available
<u>Bio-accumulative Potential:</u>	No data available
<u>Mobility in Soil:</u>	Soil/water partition coefficient (Koc): Not available
<u>Persistence and Degradability:</u>	Biodegradable based on components.
<u>Other Adverse Effects:</u>	No known significant effects or critical hazards

SECTION 13 — DISPOSAL CONSIDERATIONS

<u>Methods of Disposing this Product:</u>	<p>The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.</p> <p>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.</p>
<u>Disposing of Waste Packaging:</u>	<p>Waste packaging should be recycled. Incineration of 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 empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal or spilled material and runoff and contact with soil, waterways, drains and sewers.</p>

SECTION 14 — TRANSPORT INFORMATION

	<u>TDG/DOT Classification</u>	<u>IMDG</u>	<u>IATA</u>
--	-------------------------------	-------------	-------------

UN Number	Not regulated	Not regulated	Not regulated
UN proper shipping name	-	-	-
Transport Hazard Class(es)	-	-	-
Packing Group	-	-	-
Environmental Hazards	No	No	No
Additional Information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available

Special Precautions For User: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

SECTION 15 — REGULATORY INFORMATION

U.S. Federal Regulations:

<u>United States Inventory (TSCA):</u>	All components are listed or exempted
<u>Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPS):</u>	Not listed
<u>Clean Air Act Section 602 Class I Substances:</u>	Not listed
<u>Clean Air Act Section 602 Class II Substances:</u>	Not listed
<u>DEA List I Chemicals (Precursor Chemicals):</u>	Not listed
<u>DEA List II Chemicals(Essential Chemicals):</u>	Not listed

SARA 302/304

Composition/Information on Ingredients: Not listed

SARA 311/312

Classification: Immediate (acute) health hazard

Composition/Information on Ingredients

Name	%	Fire Hazard	Sudden Release of Pressure	Reactive	Immediate (acute) Health Hazard	Delayed (chronic) Health Hazard
Organic acid salt	5-50	No	No	No	Yes	No

International Lists - National Inventory:

<u>Australia (AICS):</u>	At least one component is not listed.
<u>Canada (DSL):</u>	All components are listed or exempted.
<u>China (IECSC):</u>	At least one component is not listed.
<u>Europe (EINECS):</u>	At least one component is not listed.
<u>Japan (ENCS):</u>	All components are listed or exempted.
<u>New Zealand (NZIoC):</u>	At least one component is not listed.
<u>Philippines (PICCS):</u>	At least one component is not listed.
<u>Republic of Korea (KECL):</u>	At least one component is not listed.
<u>Taiwan (NECI):</u>	At least one component is not listed.

SECTION 16 — OTHER INFORMATION

Prepared by: TMP Inc.

Additional advice:

To the best of our knowledge 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.