SAFETY DATA SHEET

HG

HG tile cement, mortar & efflorescence remover

Section 1. Identifie	cation
Product identifier	: HG tile cement, mortar & efflorescence remover
Other means of identification	: Limex, Product 12
Product type	: Liquid.
Relevant identified uses of t	he substance or mixture and uses advised against
Not applicable.	
Supplier's details	: Solstrand Trading 60 Lockhart Road Barrie, Ontario L4N 4G8 Canada
Emergency telephone number (with hours of operation)	: Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924 (24h)
Section 2. Hazard	identification
Classification of the substance or mixture	: SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements <u>Precautionary statements</u>	: Causes severe skin burns and eye damage.
General	: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	: Wear protective gloves: > 8 hours (breakthrough time): butyl rubber. Wear eye or face protection: Recommended: chemical splash goggles Wear protective clothing Wash hands thoroughly after handling.
Response	: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
Storage	: Store locked up.
Disposal	: Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label	: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 95,9%

elements

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

- : Limex, Product 12

CAS number/other identifiers

CAS number : Not applicable.

Product code

: 171 ART

There are no 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.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact	: Get medical attention immediately. Call a poison center or physician. 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 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Chemical burns must be treated promptly by a physician.

Most important symptoms/effects, acute and delayed

Potential acute health eff	ects
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes severe burns.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/syn</u>	<u>ptoms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate me	dical attention and special treatment needed, if necessary
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.
Specific treatments	: No specific treatment.
Date of issue/Date of revision	: 12-1-2016 Date of previous issue : 12-1-2016 Version : 2 2/10

Section 4. First-aid measures

Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it
	is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media	
Suitable extinguishing media	: Not applicable
Unsuitable extinguishin media	g : Not applicable
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds
Special protective actions for fire-fighters	 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.
Special protective equipment for fire-fighter	 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protect	tiv	e equipment and emergency procedures
For non-emergency personnel	:	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. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	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".
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 and materials for co	ont	ainment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop

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.

Section 6. Accidental release measures

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). The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. 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.

Section 7. Handling and storage

Precautions for safe handling	1	
Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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 alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:	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. See also Section 8 for additional information on hygiene measures.
Conditions for safe storage, including any incompatibilities	:	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. Store locked up. Separate from alkalis. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Hydrochloric acid	CA Alberta Provincial (Canada, 4/2009). Skin sensitizer. C: 3 mg/m ³ C: 2 ppm CA British Columbia Provincial (Canada, 5/2015). C: 2 ppm CA Ontario Provincial (Canada, 7/2015). C: 2 ppm CA Quebec Provincial (Canada, 1/2014). STEV: 5 ppm 15 minutes. STEV: 7,5 mg/m ³ 15 minutes. CA Saskatchewan Provincial (Canada). CEIL: 2 ppm

Appropriate engineering controls

: 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.

Section 8. Exposure controls/personal protection

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.
Individual protection meas	<u>ures</u>
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.
Eye/face protection	: 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: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: chemical splash goggles.
Skin protection	
Hand protection	: 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. > 8 hours (breakthrough time): butyl rubber
Body protection	: 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.
Other skin protection	: 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.
Respiratory protection	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	: Liquid.
Color	: Yellowish.
Odor	: Characteristic.
Odor threshold	: Not available.
рН	: <1 [Conc. (% w/w): 100%]
Melting point	: 0°C (32°F)
Boiling point	: 100°C (212°F)
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Easily soluble in the following materials: cold water and hot water.

Date of issue/Date of revision

Section 9. Physical and chemical properties

Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 157 mPa·s (157 cP)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Hazardous reactions or instability may occur under certain conditions of storage or use.
Conditions to avoid	: No specific data.
Incompatible materials	: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sulphamidic acid	LD50 Oral	Rat	3160 mg/kg	-

Irritation/Corrosion					
Product/ingredient name	Result	Species	Score	Exposure	Observation
Hydrochloric acid	Eyes - Mild irritant	Rabbit	-	0.5 minutes 5 milligrams	-
	Skin - Mild irritant	Human	-	24 hours 4 Percent	-
sulphamidic acid	Eyes - Moderate irritant	Rabbit	-	20 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Skin - Mild irritant	Human	-	120 hours 4 Percent	-
	Skin - Severe irritant	Rabbit	-	Intermittent 24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Section 11. Toxicological information

	_	<u> </u>
Teratogenicity Not available.		
Specific target organ toxicit Not available.	ty (s	<u>single exposure)</u>
Specific target organ toxicit Not available.	t <mark>y (</mark> r	repeated exposure)
Aspiration hazard Not available.		
Information on the likely routes of exposure	:	Not available.
Potential acute health effects	2	
Eye contact	:	Causes serious eye damage.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	:	Causes severe burns.
Ingestion	:	No known significant effects or critical hazards.
		al, chemical and toxicological characteristics
Eye contact	:	Adverse symptoms may include the following: pain watering redness
Inhalation	:	No specific data.
Skin contact	:	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	:	Adverse symptoms may include the following: stomach pains
Delayed and immediate effect	<u>ts a</u>	and also chronic effects from short and long term exposure
Short term exposure		
Potential immediate effects	-	Not available.
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	-	Not available.
Potential delayed effects	1	Not available.
Potential chronic health effe	ects	2
Not available.		
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.

: 12-1-2016

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

Date of previous issue

:12-1-2016

Developmental effects

Teratogenicity

Fertility effects

Version :2

Section 11. Toxicological information

Acute toxicity estimates

Route	ATE value
Oral	3232,9 mg/kg

Section 12. Ecological information

Toxicity Product/ingredient name Result **Species** Exposure Hydrochloric acid Acute LC50 240000 µg/l Marine water Crustaceans - Carcinus maenas 48 hours - Adult Acute LC50 282 ppm Fresh water Fish - Gambusia affinis - Adult 96 hours Fish - Pimephales promelas Acute LC50 14200 µg/l Fresh water 96 hours sulphamidic acid **Conclusion/Summary** : Easily biological degradable

Persistence and degradability

Conclusion/Summary	: Easily biological degradable		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
HG tile cement, mortar & efflorescence remover	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
sulphamidic acid	0,101	-	low

<u>Mobility in soil</u>		
Soil/water partition	: Not available.	

coefficient (Koc)

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods 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 nonrecyclable 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.

Section 14. Transport information

	TDG Classification	DOT Classification	ADR/RID	IMDG	ΙΑΤΑ
UN number	UN1760	UN1760	UN1760	UN1760	UN1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Hydrochloric acid, sulphamidic acid)
Transport hazard class(es)	8	8 CORRIGUE	8	8	8
Packing group	111	111	111	111	111
Environmental hazards	No.	No.	No.	No.	No.
Additional information	Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 40-2.42 (Class 8).	-	Hazard identification number 80 Limited quantity 5 L Tunnel code (E)	<u>Emergency</u> <u>schedules (EmS)</u> F-A, S-B	-

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 an accident or spillage.

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

Section 15. Regulatory information

Canadian lists

Canadian NPRI

: The following components are listed: Hydrochloric acid

- **CEPA Toxic substances**
- : None of the components are listed.
- Canada inventory
- : Not determined.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: All components are listed or exempted.
China	: Not determined.
Europe	: Not determined.
Japan	: Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: All components are listed or exempted.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Turkey	: Not determined.
United States	: Not determined.

Section 16. Other information

<u>History</u>	
Date of printing	: 27-1-2016
Date of issue/Date of revision	: 12-1-2016
Date of previous issue	: 12-1-2016
Version	: 2
Key to abbreviations	 ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations HPR = Hazardous Products Regulations

Procedure used to derive the classification

Classification	Justification
0,	On basis of test data On basis of test data

References : 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 abovenamed 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.