



# Material Safety Data Sheet




## Cement, mortar & efflorescence remover (limex)

### Section 1. Chemical product and company identification

**Manufacturer** : HG International b.v. **Code** : 1711064  
**Address** : Damsluisweg 70 1332 EJ Almere **MSDS#** : 1.12  
**Country** : Netherlands **Validation date** : 12-9-2007.  
**Telephone No.:** : +31 (0)36 54 94 700 **Print date** : 12-9-2007.  
**Fax** : +31 (0)36 54 94 744 **Responsible name** : P. Stienstra  
**Internet:** : www.hginternational.com **Telephone No.:** : +1.705.726.5445  
**Supplier** : Solstrand Trading **Fax** : +1.705.734.0857  
**Address** : 60 Lockhart road Barrie, Ontario L4N 9G8 **Country** : Canada

**Material uses** : Removes tenacious surplus cement from ceramic tiles, flag stones and non-calciferous natural stones such as Norwegian slate, granite, sandstone, quartz ore, etc.

 **In Case of Emergency** : **Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924**

### Section 2. Composition, Information on Ingredients

Name	CAS #	% by weight	Exposure limits
Hydrochloric acid	7647-01-0	5 - 15	Not available.
Sulphamidic acid	5329-14-6	1 - 5	Not available.
alcohols, c11-14-iso-, c13-rich, ethoxylated	78330-21-9	1 - 5	Not available.

### Section 3. Hazards identification

**Physical State and Appearance** : Liquid.

**Emergency overview** : DANGER  
CORROSIVE.  
CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS.  
Irritating to respiratory system.  
Avoid contact with eyes, skin and clothing.  
Avoid breathing vapors of this product.  
Do not ingest.  
Do not mix with [\*\*\*].Chlorine bleaching agent  
Use only in well-ventilated areas.

**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

**Eyes** : Severely corrosive to the eyes. Causes severe burns.  
**Skin** : Severely corrosive to the skin. Causes severe burns.  
**Inhalation** : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.  
**Ingestion** : May cause burns to mouth, throat and stomach.

**Potential chronic health effects** : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [Hydrochloric acid].  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.

**Medical conditions aggravated by overexposure:** : Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray or mist may produce respiratory tract irritation, leading to frequent attacks of bronchial infection.

**Over-exposure signs/symptoms** : Overexposure can result in severe irritation of eyes, skin, respiratory tract or ingestion system.

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[See toxicological Information \(section 11\)](#)

## Section 4. First aid measures

- Eye Contact** : Get medical attention immediately. 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.
- Skin Contact** : Get medical attention immediately. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing 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.
- Inhalation** : Get medical attention immediately. Move exposed person to fresh air. Keep person warm and at rest. 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. 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.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. 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 the lungs. Chemical burns must be treated promptly by a physician. 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.
- Notes to Physician** : Not available.

## Section 5. Fire fighting measures

- Flammability of the product** : Non-flammable.
- Auto-ignition Temperature** : Not applicable.
- Flash Points** : Not applicable.
- Flammable limits** : Not applicable.
- Products of combustion** : Not applicable.
- Fire hazards in presence of various substances** : Not applicable.
- Explosion hazards in presence of various substances** : Risk of explosion of the product in the presence of mechanical impact: Not available. Risk of explosion of the product in the presence of static discharge: Not available.
- Fire fighting media and instructions** : Use an extinguishing agent suitable for the surrounding fire.  
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.  
In a fire or if heated, a pressure increase will occur and the container may burst.
- 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.
- Special remarks on fire hazards** : Non-combustible.
- Special remarks on explosion hazards** : No additional remark.

## Section 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).

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- 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** : 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

- 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. 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.
- 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 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

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

### Personal protection

- Eyes** : Recommended: safety glasses with side shields
- Skin** : Recommended: Work uniform or laboratory coat.
- Respiratory** : Recommended: A respirator is not needed under normal and intended conditions of product use.
- Hands** : >8 hours (breakthrough time): Butyl rubber gloves.
- Other protection** : Not available.

### Personal protective equipment (Pictograms)



- Personal protection in case of a large spill** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be adequate. Consult a specialist before handling this product.

### Product Name

Hydrochloric acid  
Sulphamic acid  
alcohols, c11-14-iso-, c13-rich, ethoxylated

### Exposure limits

Not available.  
Not available.  
Not available.

[Consult local authorities for acceptable exposure limits.](#)

## Section 9. Physical and chemical properties

- Physical State and Appearance** : Liquid.
- Color** : Colorless to light yellow. (Light.)
- Odor** : Acetic acid.
- pH** : <1 [Acidic.]
- Relative density** : 1.071 g/cm<sup>3</sup>
- Viscosity** : Dynamic: Highest known value: 157 cP (alcohols, c11-14-iso-, c13-rich, ethoxylated)

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- Solubility** : Soluble in the following materials: cold water, hot water.
- Flash point** : Not applicable.
- Explosive properties** : Risk of explosion of the product in the presence of mechanical impact: Not available. Risk of explosion of the product in the presence of static discharge: Not available.
- Oxidizing properties** : Not applicable.
- Physical chemical comments** : Not available.

## Section 10. Stability and reactivity

- Stability and Reactivity** : The product is stable.
- Conditions of instability** : Not available.
- Incompatibility with various substances** : Highly reactive with Chlorine bleaching agent Reactive with alkalis and metals
- Hazardous Decomposition Products** : Decomposition products may include the following materials: halogenated compounds, carbon oxides (CO, CO<sub>2</sub>)
- Hazardous polymerization** : Will not occur.

## Section 11. Toxicological information

Sulphamidic acid	LD50	3160 mg/kg	Oral	Rat
	LD50	1050 mg/kg	Oral	Guinea pig
	LD50	1312 mg/kg	Oral	Mouse
alcohols, c11-14-iso-, c13-rich, ethoxylated	LD50	200 to 2000 mg/kg	Oral	Rat

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [Hydrochloric acid]. Contains material which causes damage to the following organs: skin, eyes.
- Other toxic effects on humans** : Extremely hazardous by the following route of exposure: of skin contact (irritant), of eye contact (irritant). Hazardous by the following route of exposure: of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung irritant, lung corrosive).
- Special remarks on toxicity to animals** : Very low toxicity for humans or animals. (alcohols, c11-14-iso-, c13-rich, ethoxylated)
- Special remarks on chronic effects on humans** : Not available.
- Special remarks on other toxic effects on humans** : Not available.
- Specific effects**
- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Reproduction toxicity** : No known significant effects or critical hazards.

## Section 12. Ecological information

Sulphamidic acid	PIMEPHALES PROMELAS (LC50)	96 hour(s)	>14.2 mg/l
	Pimephales promelas (LC50)	96 hour(s)	70.3 mg/l
alcohols, c11-14-iso-, c13-rich, ethoxylated	Flora (EC50)	72 hour(s)	1 to 10 mg/l
	LEUCISCUS IDUS (LC50)	96 hour(s)	1 to 10 mg/l
	Aquatic invertebrates. (LC50)	48 hour(s)	1 to 10 mg/l

- BOD and COD** : Not available.
- Biodegradable/OECD** : Biodegradable
- Mobility** : Not available.
- Products of degradation** : Decomposition products may include the following materials: carbon oxides (CO, CO<sub>2</sub>), halogenated compounds.
- Toxicity of the products of biodegradation** : The products of degradation are as toxic as the product itself.

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**Special remarks on the products of biodegradation** : Not available.




### Section 13. Disposal considerations

**Waste information** : The generation of waste should be avoided or minimized wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



**Waste stream** : Not available.

Consult your local or regional authorities.

### Section 14. Transport information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	1760	UN 1760, CORROSIVE LIQUID , N.O.S., (Hydrochloric Acid, 10%, mixture) Class 8, PG III (Hydrochloric acid, Sulphamidic acid)	8	III		<p><b>Limited quantity</b> Yes.</p> <p><b>Special provisions</b> Limited Quantity for inner packages less than 4 liters</p> <p><b>Remarks</b> ORM-D / CONSUMER COMMODITY for inner packages less than 4 liters</p>
<b>TDG Classification</b>	1760	UN 1760, CORROSIVE LIQUID , N.O.S., (Hydrochloric Acid, 10%, mixture) Class 8, PG III (Hydrochloric acid, Sulphamidic acid)	8	III		<p><b>Special provisions</b> ORM-D / CONSUMER COMMODITY</p> <p><b>Remarks</b> Limited Quantity</p>
<b>ADR/RID Class</b>	1760	UN 1760, "dangerous goods in limited quantities of class 8", III, ADR Mixture	8	III		<p><b>Hazard identification number</b> 80</p> <p><b>Reportable quantity</b> 12</p> <p><b>Remarks</b> Limited quantity for upto 3 litre inner packing Else; UN 1760, CORROSIVE LIQUID, N.O.S., (Hydrochloric acid, 10%, mixture), class 8, III, ADR</p>

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<b>IMDG Class</b>	1760	"dangerous goods in limited quantities of class 8" UN 1760, PG III Mixture	8	III		<b>Emergency schedules (EmS)</b> 8-15  <b>Reportable quantity</b> 30  <b>Remarks</b> Limited quantity for upto 1 litre inner packing Else; UN 1760, CORROSIVE LIQUID, N.O.S., (Hydrochloric acid, 10%, mixture), class 8, PG III
<b>IATA-DGR Class</b>	1760	"dangerous goods in limited quantities of class 8" UN 1760, PG III Mixture	8	III		<b>Remarks</b> Dangerous goods in limited quantities

## Section 15. Regulatory information

**WHMIS (Canada)** : Class E: Corrosive liquid.  
No products were found.

**International regulations**

**EINECS** : Not available.  
**DSCL (EEC)** : R34- Causes burns.  
 R37- Irritating to respiratory system.

**International lists** : Not available.

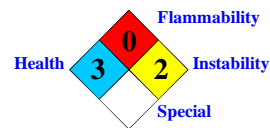
## Section 16. Other information

**Label Requirements** : CORROSIVE.  
CAUSES DIGESTIVE TRACT, EYE AND SKIN BURNS.  
Irritating to respiratory system.

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

Health	*	3
Fire hazard		0
Reactivity		2
Personal protection		B

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



**References** : Not available.

**Other special considerations** : Not available.

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**Date of previous issue** : No previous validation.  
**Version** : 1.12

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