



# Material Safety Data Sheet



## Glass & mirror spray

### Section 1. Chemical product and company identification

**Manufacturer** : HG International b.v. **Code** : 1420506  
**Address** : Damsluisweg 70 1332 EJ Almere **MSDS#** : 2.02  
**Country** : Netherlands **Validation date** : 4-1-2008.  
**Telephone No.:** : +31 (0)36 54 94 700 **Print date** : 4-1-2008.  
**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** : Easily removes dirt, grease etc. from all sorts glass and mirrors  
**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
Water	7732-18-5	60-100	Not available.
Ethanol	64-17-5	15 - 30	Not available.
Mixture of lauryl ether carboxylic acid and sodium octyl sulfate	27306-90-7 / 142-31-4	0.1-1	Not available.
Ammonia	1336-21-6	0.1-1	Not available.
Perfume ingredient.		0.01-0.05	Not available.
Nonionics		0.001-0.005	Not available.

### Section 3. Hazards identification

**Physical State and Appearance** : Liquid.

**Emergency overview** : Warning!  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: BLOOD, REPRODUCTIVE SYSTEM, LIVER, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.  
FLAMMABLE LIQUID AND VAPOR.  
VAPOR MAY CAUSE FLASH FIRE.  
Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation.

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

**Potential acute health effects**

**Eyes** : May cause eye irritation.  
**Skin** : May cause skin irritation.  
**Inhalation** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

**Potential chronic health effects** : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethanol].  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.

**Medical conditions aggravated by overexposure:** : Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**Over-exposure signs/symptoms** : Not available.

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

## Section 4. First aid measures

- Eye Contact** : In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
- Skin Contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
- Inhalation** : If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to Physician** : Not available.

## Section 5. Fire fighting measures

- Flammability of the product** : Flammable.
- Auto-ignition Temperature** : Lowest known value: 370°C (698°F) (Ethanol).
- Flash Points** : Closed cup: 32°C (89.6°F). (Pensky-Martens.) Open cup: 31°C (87.8°F) (Cleveland.).
- Flammable limits** : Greatest known range: Lower: 3.4% Upper: 19% (Ethanol)
- Products of combustion** : Decomposition products may include the following materials: carbon oxides (CO, CO<sub>2</sub>).
- Fire hazards in presence of various substances** : Flammable in presence of open flames, sparks and static discharge.
- Explosion hazards in presence of various substances** : Not available.
- Fire fighting media and instructions** : In case of fire, use water spray (fog), foam, dry chemicals, or CO<sub>2</sub>.  
Flammable liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Special protective equipment for fire-fighters** : Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.
- Special remarks on fire hazards** : No additional remark.
- Special remarks on explosion hazards** : Not available.

## Section 6. Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Do not touch or walk through spilled material.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

## Section 7. Handling and storage

- Handling** : Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment.
- Storage** : Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

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## Section 8. Exposure Controls, Personal Protection

**Engineering controls** : No special ventilation requirements.

**Personal protection**

**Eyes** : 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 or dusts.

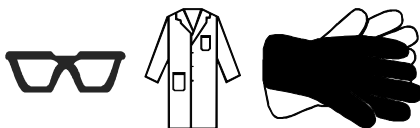
**Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory** : Use a properly fitted, air-purifying or air-fed 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.

**Hands** : Chemical-resistant, impervious gloves or gauntlets complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Other protection** : Not available.

**Personal protective equipment (Pictograms)** :



**Personal protection in case of a large spill** : Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Product Name**

Ethanol

**Exposure limits**

Not available.

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

## Section 9. Physical and chemical properties

**Physical State and Appearance** : Liquid.

**Color** : Colorless. Clear

**Odor** : Perfumed

**pH** : 9.8 (Conc. (% w/w): 100) [Basic.]

**Relative density** : 0.971g/cm<sup>3</sup> (20°C / 68°F)

**Viscosity** : Not available.

**Solubility** : Easily soluble in the following materials: cold water, hot water, diethyl ether, acetone.

**Flash point** : Closed cup: 32°C (89.6°F). (Pensky-Martens.) Open cup: 31°C (87.8°F) (Cleveland.).

**Flammability (solid, gas)** : Not applicable.

**Explosive properties** : Not available.

**Explosion Limits** : Greatest known range: Lower: 3.4% Upper: 19% (Ethanol)

**Oxidizing properties** : Not available.

**Physical chemical comments** : Solubility in other solvents: not soluble

## Section 10. Stability and reactivity

**Stability and Reactivity** : The product is stable.

**Conditions of instability** : Stable under recommended storage and handling conditions (see section 7). Keep away from heat, sparks and flame. Keep away from heat, sparks and flame.

**Incompatibility with various substances** : Slightly reactive to reactive with acids.

**Hazardous Decomposition Products** : Not available.

**Hazardous polymerization** : Will not occur.

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## Section 11. Toxicological information

Ethanol	LD50	7060 mg/kg	Oral	Rat
	LD50	3450 mg/kg	Oral	Mouse
	LD50	6300 mg/kg	Oral	Rabbit
	LD50	15.8 mg/kg	Dermal	Rabbit
	LDLo	1400 mg/kg	Oral	human
	LDLo	5500 mg/kg	Oral	Dog
	LC50	64 (4 hour(s))	Inhalation	Rat

**Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for human or animal.) by ACGIH [Ethanol]. Contains material which causes damage to the following organs: blood, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

**Other toxic effects on humans** : Non-irritant for skin. Non-irritating to the eyes.

**Special remarks on toxicity to animals** : Not available.

**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

Ethanol	Daphnia magna (EC50)	48 hour(s)	2 mg/l
	Daphnia magna (EC50)	48 hour(s)	9.3 mg/l
	Daphnia magna (EC50)	48 hour(s)	>100 mg/l
	Pimephales promelas (LC50)	96 hour(s)	>100 mg/l
	Daphnia magna (LC50)	96 hour(s)	>100 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	13000 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>) and water.

**Toxicity of the products of biodegradation** : The products of degradation are less toxic than the product itself.

**Special remarks on the products of biodegradation** : No additional remark.

## Section 13. Disposal considerations






**Waste information** : The generation of waste should be avoided or minimised wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. 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.

**Waste stream** : Not available.

**Consult your local or regional authorities.**

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## Section 14. Transport information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
<b>DOT Classification</b>	1993	"dangerous goods in limited quantities of class 3" UN 1993, PG III (Ethanol)	Combustible liquid.	III		<b>Limited quantity</b> Yes.  <b>Remarks</b> Limited quantity for 500 ml and 1 litre package
<b>TDG Classification</b>	1993	"dangerous goods in limited quantities of class 3" UN 1993, PG III (Ethanol)	3	III		<b>Remarks</b> Limited quantity for 500 ml and 1 litre package
<b>ADR/RID Class</b>	1993	UN 1993, "dangerous goods in limited quantities of class 3", III, ADR (Ethanol)	3	III		<b>Hazard identification number</b> 30  <b>Reportable quantity</b> 45  <b>Remarks</b> Limited quantity for upto 5 litre inner packing
<b>IMDG Class</b>	1993	"dangerous goods in limited quantities of class 3" UN 1993, PG III, (Ethanol)	3	III		<b>Emergency schedules (EmS)</b> F-E, S-E  <b>Reportable quantity</b> 30  <b>Remarks</b> Limited quantity for upto 5 litre inner packing
<b>IATA-DGR Class</b>	1993	"dangerous goods in limited quantities of class 3" UN 1993, PG III, (Ethanol)	3	III		-

## Section 15. Regulatory information

**WHMIS (Canada)** : Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).  
No products were found.

### International regulations

**EINECS** : Not available.

**DSCL (EEC)** : R10- Flammable.

**International lists** : Australia (NICNAS): Water; Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; orange, sweet, ext.; Ammonia; poly(oxy-1,2-ethanediy), .alpha.-hydro.-omega.-hydroxy-, ether with .alpha.-fluoro.-omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1); propan-2-ol; 1,4-dioxane

China: Water; Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; orange, sweet, ext.; Ammonia; poly(oxy-1,2-ethanediy), .alpha.-hydro.-omega.-hydroxy-, ether with .alpha.-fluoro.-omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1); propan-2-ol; 1,4-dioxane

Germany water class: Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; orange, sweet, ext.; Ammonia; propan-2-ol; 1,4-dioxane

Japan (MITI): Water; Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; Ammonia; propan-

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2-ol; 1,4-dioxane

Japan (MOL): Dipentene; propan-2-ol

Korea (TCCL): Water; Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; orange, sweet, ext.; Ammonia; poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with .alpha.-fluoro-.omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1); propan-2-ol; 1,4-dioxane

Philippines (RA6969): Water; Ethanol; Methanol; heptanoic acid, 2-propenyl ester; Dipentene; orange, sweet, ext.; Ammonia; poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-, ether with .alpha.-fluoro-.omega.-(2-hydroxyethyl)poly(difluoromethylene) (1:1); propan-2-ol; 1,4-dioxane

## Section 16. Other information

**Label Requirements** : CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: BLOOD, REPRODUCTIVE SYSTEM, LIVER, RESPIRATORY TRACT, SKIN, CENTRAL NERVOUS SYSTEM, EYE, LENS OR CORNEA.  
FLAMMABLE LIQUID AND VAPOR.  
VAPOR MAY CAUSE FLASH FIRE.

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

Health	1
Fire hazard	2
Reactivity	0
Personal protection	C

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



**References** : Not available.

**Other special considerations** : Not available.

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### Notice to reader

To the best of our knowledge, the 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.