



Material Safety Data Sheet




Hygienic whirlpool bath cleaner

Section 1. Chemical product and company identification

Manufacturer : HG International b.v. **Code** : 4481000
Address : Damsluisweg 70 1332 EJ Almere **MSDS#** : 1.04
Country : Netherlands **Validation date** : 5/19/2010.
Telephone No.: : +31 (0)36 54 94 700 **Print date** : 5/19/2010.
Fax : +31 (0)36 54 94 744 **Responsible name** : P. Stienstra
Internet: : www.hg.eu **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 : Cleaner.

 **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
aqua	7732-18-5	30-100	Not available.
2-hydroxy propionic acid	79-33-4	5-15	Not available.
propan-2-ol	67-63-0	1 - 5	Not available.
sulfuric acid, mono(2-ethylhexyl) ester, sodium salt	126-92-1	1-5	Not available.
Ethylhexanol	104-76-7	0.1-0.5	Not available.
Sodium hydroxide	1310-73-2	0.1-0.5	Not available.
quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts)	68989-03-7	0-1	Not available.
Perfume ingredient.		0-0.5	Not available.
oils, tea-tree	68647-73-4	0.01-0.1	Not available.

Section 3. Hazards identification

Physical State and Appearance : Liquid.

Emergency overview : CAUTION !
May cause eye irritation.
Combustible liquid. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that can cause target organ damage. Use only with adequate ventilation.

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

Potential acute health effects

Eyes : May cause eye irritation.
Skin : May cause skin irritation.

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 human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [propan-2-ol].
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.

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

Over-exposure signs/symptoms : Not available.

[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.
- 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** : Combustible.
- Auto-ignition Temperature** : Lowest known value: 399°C (750.2°F) (propan-2-ol).
- Flash Points** : Closed cup: Between 61°C (142°F) and 93.3°C (200°F). (Pensky-Martens.)
- Flammable limits** : Not available.
- Products of combustion** : Decomposition products may include the following materials: carbon oxides (CO, CO₂), sulfur oxides (SO₂, SO₃...). Some metallic oxides.
- Fire hazards in presence of various substances** : Not available.
- Explosion hazards in presence of various substances** : Not available.
- Fire fighting media and instructions** : In case of fire, use water spray (fog), foam, dry chemical or CO₂.
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- 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** : COMBUSTIBLE.
- Special remarks on explosion hazards** : Not available.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).
- 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. Use spark-proof tools and explosion-proof equipment. 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. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from alkalis. Separate from oxidizing materials. 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. Ensure that eyewash stations and safety showers are proximal to the work-station location.

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 sufficient; consult a specialist BEFORE handling this product.

Product Name

Exposure limits

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propan-2-ol

ACGIH (United States).

TWA: 400 ppm

ACGIH TLV (United States, 1/2004). Notes: ACGIH 2003 Adoption Refers to Appendix A -- Carcinogens.

STEL: 400 ppm 15 minute(s). Form: All forms

TWA: 200 ppm 8 hour(s). Form: All forms

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

Section 9. Physical and chemical properties

Physical State and Appearance	: Liquid.
Color	: Blue. [Light]
Odor	: Fragrance-like.
pH	: 1.89 (Conc. (% w/w): 100) [Acidic.]
Relative density	: 1.0237 g/cm ³ (20°C / 68°F)
Viscosity	: Dynamic: Highest known value: 26 cP (2-hydroxy propionic acid)
Solubility	: Easily soluble in the following materials: hot water, diethyl ether, acetone. Soluble in the following materials: cold water.
Flash point	: Closed cup: Between 61°C (142°F) and 93.3°C (200°F). (Pensky-Martens.)
Explosive properties	: Not available.
Oxidizing properties	: Not available.
Physical chemical comments	: Not available.

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).
Incompatibility with various substances	: Reactive with alkalis.
Hazardous Decomposition Products	: Not available.
Hazardous polymerization	: Will not occur.

Section 11. Toxicological information

propan-2-ol	LD50	5045 mg/kg	Oral	Rat
	LD50	6410 mg/kg	Oral	Rabbit
	LD50	3600 mg/kg	Oral	Mouse
	LD50	12800 mg/kg	Dermal	Rabbit
	LD50	12800 mg/kg	Dermal	Rabbit
	LDLo	1537 mg/kg	Oral	Dog
	LDLo	3570 mg/kg	Oral	human
2-hydroxy propionic acid	LDLo	5272 mg/kg	Oral	man
	Not available.	Not available.	Not available.	Not available.
	LD50	3580 mg/kg	Oral	Rabbit
sulfuric acid, mono(2-ethylhexyl) ester, sodium salt	LD50	650 mg/kg	Oral	Guinea pig
	LD50	1550 mg/kg	Oral	Mouse
	LDLo	1520 mg/kg	Dermal	Guinea pig
	LD50	>2000 mg/kg	Oral	Mouse
quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts)	LD50	>2000 mg/kg	Oral	Mouse
	Not available.	Not available.	Not available.	Not available.
Perfume ingredient. oils, tea-tree	LD50	2000 to 2700 mg/kg	Oral	Rat
	LD50	3730 mg/kg	Oral	Rat
Ethylhexanol	LD50	1180 mg/kg	Oral	Rabbit
	LD50	1860 mg/kg	Oral	Guinea pig
	LD50	1970 mg/kg	Dermal	Rabbit
	LDLo	500 mg/kg	Oral	Rabbit

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Chronic effects on humans	: CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC [propan-2-ol]. Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Other toxic effects on humans	: Extremely hazardous by the following route of exposure: of eye contact (irritant). Hazardous by the following route of exposure: of skin contact (irritant).
Special remarks on toxicity to animals	: No additional remark.
Special remarks on chronic effects on humans	: No additional remark.
Special remarks on other toxic effects on humans	: No additional remark.
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

propan-2-ol	FATHEAD MINNOWS (EC50)	96 hour(s)	6550 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	>1400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	6550 mg/l
	Pimephales promelas (LC50)	96 hour(s)	9640 mg/l
	Pimephales promelas (LC50)	96 hour(s)	10400 mg/l
	Pimephales promelas (LC50)	96 hour(s)	11130 mg/l
2-hydroxy propionic acid	Daphnia magna (EC50)	48 hour(s)	240 mg/l
	Daphnia magna (EC50)	48 hour(s)	750 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	130 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	130 mg/l
	Selenastrum capricornutum (LC50)	96 hour(s)	320 mg/l
quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts)	Not available.	Not available.	Not available.
Perfume ingredient.	Not available.	Not available.	Not available.
oils, tea-tree	Not available.	Not available.	Not available.
Sodium hydroxide	Not available.	Not available.	Not available.
sulfuric acid, mono(2-ethylhexyl) ester, sodium salt	Not available.	Not available.	Not available.
Ethylhexanol	Lepomis macrochirus (LC50)	96 hour(s)	10 mg/l
	Pimephales promelas (LC50)	96 hour(s)	28.2 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 ₂) and water
Toxicity of the products of biodegradation	: The product itself and its products of degradation are not toxic.
Special remarks on the products of biodegradation	: No additional remark.






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.

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[Consult your local or regional authorities.](#)

Section 14. Transport information

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	3265	'dangerous goods in limited quantities of class 8" UN 3265, PG III (Sodium hydroxide)	8	III		Limited quantity Yes. Remarks Limited Quantity
TDG Classification	3265	"dangerous goods in limited quantities of class 8" UN 3265, PG III (Sodium hydroxide)	8	III		Remarks Limited quantity for 1 litre package
ADR/RID Class	3265	UN 3265, 'dangerous goods in limited quantities of class 8", III, ADR	8	III		Hazard identification number 80 Reportable quantity 12 Remarks Keep in frostfree area Dangerous goods in limited quantities
IMDG Class	3265	'dangerous goods in limited quantities of class 8" UN 3265, PG III, (Lactic acid 10%, mixture)	8	III		Emergency schedules (EmS) F-A, S-B Reportable quantity 30 Remarks Keep in frostfree area Dangerous goods in limited quantities
IATA-DGR Class	3265	'dangerous goods in limited quantities of class 8" UN 3265, PG III,	8	III		Remarks Keep in frostfree area

Section 15. Regulatory information

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

International regulations

EINECS : Not available.

DSCL (EEC) : R41- Risk of serious damage to eyes.
R38- Irritating to skin.

International lists : Australia (NICNAS): aqua; propan-2-ol; oils, tea-tree; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts); sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

China: aqua; propan-2-ol; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts); sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

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Germany water class: propan-2-ol; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

Japan (MITI): aqua; propan-2-ol; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

Japan (MOL): propan-2-ol

Korea (TCCL): aqua; propan-2-ol; oils, tea-tree; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; quaternary ammonium compounds, coco alkylbis(hydroxyethyl)methyl, ethoxylated, me sulfates (salts); sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

Philippines (RA6969): aqua; propan-2-ol; oils, tea-tree; bicyclo[2.2.1]heptan-2-ol, 1,7,7-trimethyl-, acetate, exo-; phenyl ether; benzoic acid, 2-hydroxy-, phenylmethyl ester; sulfuric acid, mono(2-ethylhexyl) ester, sodium salt; 2-ethyl hexanol; Sodium hydroxide; 2-hydroxy propionic acid

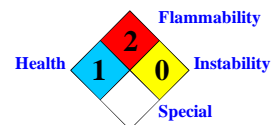
Section 16. Other information

Label Requirements : May cause eye irritation.

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

Health	*	1
Fire hazard		1
Reactivity		0
Personal protection		

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



References : Not available.

Other special considerations : Not available.

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Notice to reader

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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.