SAFETY DATA SHEET

HG

HG hygienic whirlpool bath cleaner

	fication
Product identifier	: HG hygienic whirlpool bath cleaner
Other means of identification	: Not available.
Product type	: Liquid.
Relevant identified uses of	f the substance or mixture and uses advised against
Not applicable.	
Supplier's details	:Solstrand Trading 2871 Brighton Road Oakville, Ontario L6H 6C9 Canada
Emergency telephone number (with hours of operation)	: Chem. Tel Inc. (813) 248 0585 or Toll free (800) 255 3924 (24h)
Section 2. Hazard	d identification
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Combustible liquid. Causes severe skin burns and eye damage.
Precautionary statements	<u>è</u>
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. Wear eye or face protection. Wear protective clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. 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.

Section 3. Composition/information on ingredients

Substance/mixture Other means of identification

: Mixture

: Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code

: 448 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.
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 effects	
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.
Over-exposure signs/symptor	<u>ns</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 medica	I attention and special treatment needed, if necessary
Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

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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	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: 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. Runoff to sewer may create fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
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.

Section 6. Accidental release measures

Personal precautions, protective 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. Shut off all ignition sources. No flares, smoking or flames in hazard area. 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 containment and cleaning up		
Small spill	:	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. 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

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. 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 only non-sparking tools. 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 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. Store locked up. 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

Control parameters Occupational exposure limits None. Appropriate engineering : Use only with adequate ventilation. Use process enclosures, local exhaust controls ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment. : Emissions from ventilation or work process equipment should be checked to ensure **Environmental exposure** they comply with the requirements of environmental protection legislation. In some controls cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Section 8. Exposure controls/personal protection

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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.
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.
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	: Blue.
Odor	: Floral.
Odor threshold	: Not available.
рН	: 1.89
Melting point	: 0°C (32°F)
Boiling point	: 82.5°C (180.5°F)
Flash point	: Closed cup: 61 to 93.3°C (141.8 to 199.9°F)
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	: 1.0237
Solubility	: Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n- octanol/water	: Not available.
Auto-ignition temperature	: 399°C (750.2°F)
Decomposition temperature	: Not available.
Viscosity	: Dynamic (room temperature): 26 mPa·s (26 cP)

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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	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
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 oxidizing materials
Hazardous decomposition	: Under normal conditions of storage and use, hazardous decomposition products

products

should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Inhalation

: Not available. Information on the likely routes of exposure

Potential acute health effects

: No known significant effects or critical hazards.

Section 11. Toxicological information

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Skin contact	:	Causes severe burns.
Ingestion	:	No known significant effects or critical hazards.
Symptoms related to the phy	<u>sic</u>	cal, 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</u>	and also chronic effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	1	Not available.
<u>Long term exposure</u>		
Potential immediate effects	1	Not available.
Potential delayed effects	1	Not available.
Potential chronic health eff	<u>ect</u>	<u>s</u>
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.
Teratogenicity		No known significant effects or critical hazards.
Developmental effects		No known significant effects or critical hazards.
Fertility effects		No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Rout	te	ATE value
Oral		5184,9 mg/kg

Section 12. Ecological information

<u>Toxicity</u>

Product/ingredient name	Result	Species	Exposure
Propanoic acid, 2-hydroxy-, (2S)-	Acute EC50 750 ppm Fresh water	Daphnia - Daphnia magna	48 hours
· · /	Acute LC50 320000 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute LC50 130 ppm Fresh water	Fish - Oncorhynchus mykiss	96 hours
		Algae - Pseudokirchneriella subcapitata	96 hours
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Section 12. Ecological information

Conclusion/Summary

: Readily biodegradable

Persistence and degradability

Conclusion/Summary	: Readily biodegradable		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
HG hygienic whirlpool bath cleaner	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Propanoic acid, 2-hydroxy-, (2S)-	-0,62	-	low

Mobility in soil

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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	UN3265	UN3265	UN3265	UN3265	UN3265
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Propanoic acid, 2-hydroxy-, (2S)-, mixture)				
Transport hazard class(es)	8	8	8	8	8
Packing group					111
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Section 14. Transport information

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 80Limited quantity 5 LTunnel 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

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Section 16. Other information

<u>History</u>	
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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 = International Air Transport Association IBC = 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
SKIN CORROSION - Category 1	On basis of test data 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

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