SAFETY DATA SHEET

HG scale away foam spray



Section 1. Identifi	cation
Product identifier	: HG scale away foam spray
Other means of	Not available.
identification	
Product type	: Liquid.
Relevant identified uses of t	he 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	identification
Classification of the substance or mixture	: ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1 SERIOUS EYE DAMAGE - Category 1
GHS label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	: Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statements	
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. Do not eat, drink or smoke when using this product. 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 elements	: Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 87,2%

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 : 218 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. Remove dentures if any. Stop if the exposed person feels sick as vomiting may be dangerous. 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.

Most important symptoms/effects, acute and delayed		
Potential acute health effect	<u>s</u>	
Eye contact	: Causes serious eye damage.	
Inhalation	: No known significant effects or critical hazards.	
Skin contact	: Causes severe burns.	
Ingestion	: Harmful if swallowed.	
Over-exposure signs/symptoms		
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	

Section 4. First-aid measures

Indication of immediate medical 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.	
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.	

Section 5. Fire-fighting measures Extinguishing media Suitable extinguishing : Not applicable media Unsuitable extinguishing : Not applicable media Specific hazards arising : In a fire or if heated, a pressure increase will occur and the container may burst. from the chemical Hazardous thermal : Decomposition products may include the following materials: decomposition products carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides **Special protective actions** : 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 for fire-fighters suitable training. **Special protective** Fire-fighters should wear appropriate protective equipment and self-contained ÷. equipment for fire-fighters 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. 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 mor

mall 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

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
Phosphoric acid, solution	CA Alberta Provincial (Canada, 4/2009). Skin sensitizer. 15 min OEL: 3 mg/m³ 15 minutes. 8 hrs OEL: 1 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 5/2015). STEL: 3 mg/m³ 15 minutes. TWA: 1 mg/m³ 8 hours. CA Ontario Provincial (Canada, 7/2015). STEL: 3 mg/m³ 15 minutes. TWA: 1 mg/m³ 8 hours. CA Quebec Provincial (Canada, 1/2014). STEV: 3 mg/m³ 15 minutes. TWAEV: 1 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada). STEL: 3 mg/m³ 15 minutes. TWAEV: 1 mg/m³ 8 hours.

Section 8. Exposure controls/personal protection

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.
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	ures
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	: 1.2
Melting point	: 0°C (32°F)
Boiling point	: 82.5°C (180.5°F)
Flash point	: Closed cup: Not applicable. [Product does not sustain combustion.]
Evaporation rate	: 1.7 (Butylacetaat = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
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Section 9. Physical and chemical properties

Relative density	:	1.036
Solubility	:	Easily soluble in the following materials: cold water, hot water, diethyl ether and acetone. Partially soluble in the following materials: methanol.
Partition coefficient: n- octanol/water	;	Not available.
Auto-ignition temperature	:	365°C (689°F)
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	: Under normal conditions of storage and use, hazardous reactions will not occur.
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
Phosphoric acid, solution	LD50 Oral	Rat	1.25 g/kg	-
Alcohols, C9-11, ethoxylated	LD50 Oral	Rat	1378 mg/kg	
sulphamidic acid	LD50 Oral	Rat	3160 mg/kg	

Irritation/Corrosion

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

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Section 11. Toxicological information

Reproductive toxicity Not available.						
Teratogenicity						
Not available.						
Specific target organ toxicit Not available.	<u>y (single exposure)</u>					
Specific target organ toxicit Not available.	<u>y (repeated exposure)</u>					
Aspiration hazard Not available.						
Information on the likely routes of exposure	: Not available.					
Potential acute health effects	<u>i</u>					
Eye contact	: Causes serious eye damage.					
Inhalation	: No known significant effects or critical hazards.					
Skin contact	: Causes severe burns.					
Ingestion	: Harmful if swallowed.					
Symptoms related to the phy	sical, 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	ts and also chronic effects from short and long term exposure					
Short term exposure						
Potential immediate effects	: Not available.					
Potential delayed effects Long term exposure	: Not available.					
Potential immediate effects	: Not available.					
Potential delayed effects	: Not available.					
Potential chronic health eff	<u>ects</u>					
Not available.						
General	: No known significant effects or critical hazards.					
Carcinogenicity	: No known significant effects or critical hazards.					
Mutagenicity						
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.					
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Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	1679,2 mg/kg

Section 12. Ecological information

Toxicity

Result	Species	Exposure
Acute EC50 105 ppm Fresh water	Daphnia - Daphnia magna	48 hours
		96 hours
Acute EC50 5.36 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours
C C	dubia - Neonate	
Acute EC50 2686 µg/l Fresh water	Daphnia - Daphnia magna -	48 hours
	Neonate	
Acute LC50 8500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Acute LC50 14200 µg/l Fresh water	Fish - Pimephales promelas	96 hours
-	Acute EC50 105 ppm Fresh water Acute LC50 60 ppm Fresh water Acute EC50 5.36 mg/l Fresh water Acute EC50 2686 µg/l Fresh water Acute LC50 8500 µg/l Fresh water	Acute EC50 105 ppm Fresh water Acute LC50 60 ppm Fresh water Acute EC50 5.36 mg/l Fresh waterDaphnia - Daphnia magna Fish - Lepomis macrochirus Crustaceans - Ceriodaphnia dubia - NeonateAcute EC50 2686 µg/l Fresh waterDaphnia - Daphnia magna - NeonateAcute LC50 8500 µg/l Fresh waterFish - Pimephales promelas

Conclusion/Summary : Readily biodegradable

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Alcohols, C9-11, ethoxylated	OECD 301	88 % - Readily - 28 days	-	-

Conclusion/Summary : Readily biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
HG scale away foam spray Alcohols, C9-11, ethoxylated			Readily Readily

Bioaccumulative potential

Potential
low 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 non- recyclable 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
	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

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Section 13. Disposal considerations

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	1760	1760	1760	1760	1760	
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (Phosphoric acid, solution, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Phosphoric acid, solution, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Phosphoric acid, solution, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Phosphoric acid, solution, sulphamidic acid)	CORROSIVE LIQUID, N.O.S. (Phosphoric acid, solution, sulphamidic acid)	
Transport hazard class(es)	8	8 CORRIGUE	8	8	8	
Packing group	Ш	111	Ш	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).	-	Tunnel code (E)	-	-	

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.

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

Section 15. Regulatory information

Canadian lists

Canadian NPRI

: The following components are listed: Phosphorus (total)

CEPA Toxic substances

- None of the components are listed. 5
- **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)

Section 15. Regulatory information

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	: Not determined.	
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	: Not determined.	
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
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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 = 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
SKIN CORROSION - Category 1	Calculation method 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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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.