



# SAFETY DATA SHEET

## ecobug®

Extra Strong Urinal Caps

### Section 1. Identification

**GHS product identifier** : Extra Strong Urinal Caps

**Other means of identification** : Not available.

Relevant identified uses of the substance or mixture and uses advised against

Biological Waterless Urinal System.

**Supplier's details** : APH Environmental Ltd  
Milton Farm, Llanteg, Pembrokeshire  
SA67 8PY, UK.  
Telephone: 01834 831831  
Fax: 01834 831842  
E-mail: info@ecobug.com

**Emergency telephone number (with hours of operation)** : Poison Control Centre Tel: 1-800-222-1222 24hrs

### Section 2. Hazards identification

**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : ACUTE TOXICITY: ORAL - Category 4  
ACUTE TOXICITY: SKIN - Category 4  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
AQUATIC TOXICITY (CHRONIC) - Category 3

GHS label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Harmful if swallowed or in contact with skin.  
Causes serious eye irritation.  
Causes skin irritation.  
Harmful to aquatic life with long lasting effects.

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. Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**Response** : IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.



## Section 2. Hazards identification

- Storage** : Not applicable.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazards not otherwise classified** : None known.

## Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

### CAS number/other identifiers

- CAS number** : Not applicable.
- Product code** : EB25SS

### United States

Ingredient name	%	CAS number
Sulfamic acid	30 - 60	5329-14-6
Sodium dodecylbenzenesulfonate	30 - 60	25155-30-0
Benzaldehyde	1 - 5	100-52-7

### Canada

Name	%	CAS number
Sulfamic acid	30 - 60	5329-14-6
Sodium dodecylbenzenesulfonate	30 - 60	25155-30-0
Benzaldehyde	1 - 5	100-52-7

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional 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** : 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 20 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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.
- Skin contact** : Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.



## Section 4. First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention. If necessary, call a poison center or 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 effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** : Harmful in contact with skin. Causes skin irritation.
- Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Adverse symptoms may include the following:  
irritation  
redness
- Ingestion** : No known significant effects or critical hazards.

### 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. 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 an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

- Specific hazards arising from the chemical** : This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.



## Section 5. Fire-fighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
sulfur oxides  
metal oxide/oxides
- Special protective actions for fire-fighters** : No special precaution is required.
- 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. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. 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). Water polluting material. May be harmful to the environment if released in large quantities.

### Methods and materials for containment and cleaning up

- Small spill** : Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. 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 ingest. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

- 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. 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

#### United States

#### Occupational exposure limits

Ingredient name	Exposure limits
Benzaldehyde	AIHA WEEL (United States, 5/2010). Skin sensitizer. STEL: 4 ppm 15 minutes. TWA: 2 ppm 8 hours.

#### Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
Benzaldehyde	ON 7/2010 US AIHA 5/2010	- 2	- -	- -	4 4	17 -	- -	- -	- -	- -	[3]

[3]Skin sensitization

#### Appropriate engineering controls

: No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure 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.

#### Individual protection measures

##### Hygiene measures

: Appropriate techniques should be used to remove potentially contaminated clothing. IF ON SKIN (or hair): Wash contaminated clothing before reuse.

##### 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.

##### 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

: Use a properly fitted, particulate filter 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.



## Section 9. Physical and chemical properties

### Appearance

Physical state	: Solid.
Color	: Green.
Odor	: Cherry.
Odor threshold	: Not available.
pH	: 4 [Conc. (% w/w): 1%]
VOC	: 0%
Melting point	: Not available.
Boiling point	: Not applicable.
Flash point	: >200F.
Burning time	: Not available.
Burning rate	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: Not flammable.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: Not available.
Solubility	: Not available.
Solubility in water	: Soluble in water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not applicable.
SADT	: Not available.
Specific Gravity	: Not available.
Viscosity	: Not available.

## 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	: High temperatures, direct sunlight.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials, acids and 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
Sulfamic acid	LD50 Oral	Rat	3160 mg/kg	-
Sodium dodecylbenzenesulfonate	LC50 Inhalation Vapor	Rat	310 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	438 mg/kg	-
Benzaldehyde	LD50 Oral	Rat	1300 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Sulfamic acid	Eyes - Moderate irritant	Rabbit	-	20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 µg	-
	Skin - Mild irritant	Human	-	120 hours 4% Intermittent	-
Sodium dodecylbenzenesulfonate	Skin - Severe irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 µg	-
	Eyes - Severe irritant	Rabbit	-	1%	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
Benzaldehyde	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

#### Sensitization

**Skin** : There is no data available.

**Respiratory** : There is no data available.

#### Carcinogenicity

There is no data available.

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

**Skin contact** : Harmful in contact with skin. Causes skin irritation.

**Ingestion** : Harmful if swallowed. Irritating to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

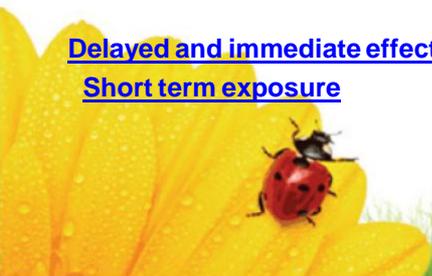
**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : No known significant effects or critical hazards.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure



## Section 11. Toxicological information

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

### Long term exposure

**Potential immediate effects** : No known significant effects or critical hazards.

**Potential delayed effects** : No known significant effects or critical hazards.

### Potential chronic health effects

**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

Route	ATE value
Oral	782.1 mg/kg
Dermal	1833.3 mg/kg

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
Sulfamic acid Sodium dodecylbenzenesulfonate	Acute LC50 14200 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 29000 µg/l Fresh water	Algae - Chlorella pyrenoidosa - Exponential growth phase	96 hours
Benzaldehyde	Acute EC50 7.81 mg/L Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 5.88 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 112.4 mg/L	Algae - Pseudokirchneriella subcapitata - Exponential growth phase	72 hours
	Acute LC50 1.18 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
Benzaldehyde	Acute LC50 1.3 mg/L Marine water	- Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 9 mg/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1269 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
Sulfamic acid	0.101	-	low
Sodium dodecylbenzenesulfonate	1.96	-	low
Benzaldehyde	1.48	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

**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 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 handling empty containers that have not been cleaned or rinsed out. Empty 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

	DOT/TDG Classification	IMDG	IATA
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-
<b>Transport hazard class(es)</b>	-	-	-
<b>Packing group</b>	-	-	-
<b>Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	<u>Reportable quantity</u> 1666.7 lbs / 756.67 kg Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.		

**AERG** : Not applicable

**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 to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

### United States

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** Benzaldehyde  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**TSCA 8(d) H and S data reporting:** Benzaldehyde  
**United States inventory (TSCA 8b):** All components are listed or exempted.  
**Clean Water Act (CWA) 311:** Sodium dodecylbenzenesulfonate



## Section 15. Regulatory information

**Clean Air Act Section 112** : Not listed

**(b) Hazardous Air Pollutants (HAPs)**

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

**Classification** : Immediate (acute) health hazard

#### Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Sulfamic acid	30 - 60	No.	No.	No.	Yes.	No.
Sodium dodecylbenzenesulfonate	30 - 60	No.	No.	No.	Yes.	No.
Benzaldehyde	1 - 5	Yes.	No.	No.	Yes.	No.

### State regulations

**Massachusetts** : The following components are listed: Sodium dodecylbenzenesulfonate; Benzaldehyde

**New York** : The following components are listed: Sodium dodecylbenzenesulfonate

**New Jersey** : The following components are listed: Sulfamic acid; Sodium dodecylbenzenesulfonate; Benzaldehyde

**Pennsylvania** : The following components are listed: Sodium dodecylbenzenesulfonate; Benzaldehyde

### California Prop. 65

No products were found.

### Canada

**WHMIS (Canada)** : Class D-2B: Material causing other toxic effects (Toxic).

#### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

**Canada inventory** : All components are listed or exempted.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### International regulations

#### International lists

**Australia inventory (AICS)**: All components are listed or exempted.

**China inventory (IECSC)**: All components are listed or exempted.

**Japan inventory**: All components are listed or exempted.

**Korea inventory**: All components are listed or exempted.

**Malaysia Inventory (EHS Register)**: Not determined.

**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.

**Philippines inventory (PICCS)**: All components are listed or exempted.

**Taiwan inventory (CSNN)**: Not determined.



## Section 15. Regulatory information

**Chemical Weapons  
Convention List Schedule  
I Chemicals** : Not listed

**Chemical Weapons  
Convention List Schedule  
II Chemicals** : Not listed

**Chemical Weapons  
Convention List Schedule  
III Chemicals** : Not listed

## Section 16. Other information

### Canada

**WHMIS (Canada)** :



### History

**Date of issue mm/dd/yyyy** : 07/15/2013

**Version** : 1

**Revised Section(s)** : Not applicable.

**Prepared by** : KMK Regulatory Services Inc.

**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 = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

### 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.

