

Product Safety Sheet

		<p>Defender Pyrotechnic Smoke Generator</p> <p>Organisation: Eclipse</p> <p>Additional Information: atmsecurity.co.uk</p> <p>Document Reference : PSS-DEFENDER-001</p> <p>Date issued: Sept 2022</p>
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Hazard classifications and precautionary statements for substance or mixture as a whole
 Hazardous substances should be controlled in accordance with this overall classification

The hazard classification for human health refers to the substances contained in the pyrotechnic article. The content is isolated and protected. During the intended use and under reasonably foreseeable conditions, no content leakage is possible and direct contact with the content is not possible. It is absolutely forbidden to attempt to open or tamper with the article or any part of it in any way. The smoke produced during the intended use is not classified as hazardous for human health according to Regulation (EC) no. 1272/2008 (CLP).

The pyrotechnic article belongs to Division 1.4 and presents no significant hazard. These articles present only a small hazard in the event of ignition or initiation. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire content of the package.

Hazard Statement	Precautionary Statement
H204 Explosive Division 1.4 Fire or Projection Hazard H302 Acute Toxicity, Category 4. Harmful if swallowed H319 Eye irritation Category 2. Causes eye irritation H400 Hazardous to Aquatic Environment. Very toxic to Aquatic Life. H411 Hazardous to Aquatic Environment. Chronic Toxicity, Category 2	P210 Keep away from heat, hot surfaces, sparks, open flames or ignition sources. No Smoking. P234 Keep only in original packaging P240 Ground and Bond container and receiving Equipment. P370+P372+P380+P373 In case of fire, explosion risk, evacuate area. Do not fight fire when fire reaches explosives P501 Dispose of contents/container in accordance with local regulations.

Constituents assigned workplace exposure limits
 Exposure limits for hazardous substances are specified in the HSE Guidance Note EH40

Constituent	Amount by Vol	Exposure Limit
Potassium Chlorate	<30%	Maximum 15 minutes when cannister has been deployed.
Sodium Carbonate	<30%	
Methylantraquinone	<40%	

Sensitisers, carcinogens, or mutagens
 Mixtures with very low levels of sensitisers, carcinogens or mutagens will not be classified as such. However, COSHH still requires exposure to sensitisers, carcinogens and mutagens to be reduced below the exposure limit SFARP.




Sensitising, Carcinogenic or Mutagenic Constituents	Amount by Vol	Hazard Type and Category
Methylantraquinone	<40%	Causes eye irritation if exposed over 15 minutes when cannister has been deployed.





Assessment of exposure during use

Description of use: Fog generated cartridge for security deployment.	
Form of substance: Dust/Fume	Exposure routes : Eye contact, inhalation, skin contact
Frequency of use: A few times a year.	Health hazard class: Not classified as harmful.
Duration of use: A few minutes at a time.	Exposure level: Low

Likelihood of harmful exposure with no control measures – Low

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Existing arrangements for storage, use and disposal	
Storage 	Storage to be kept in original containers in well ventilated area away from direct sunlight. Store away from ignition and heat sources. Do not smoke. Store separate from other chemicals.
PPE 	PPE, Hand Protection, skin protection and eye protection not required. Respiratory protection recommended if the threshold value are exceeded. Type A filter combined with type P mask is recommended.
Disposal 	Disposal or product/spent cartridge is to be in line with local authority disposal regulations.
Additional information, ill health history, results of exposure monitoring etc:	No history of ill health available for this product.

Emergency Arrangements	
Fire 	Suitable extinguishing agents, nebulised water Unsuitable extinguishing agents powders/CO2 carbon dioxide.
First Aid 	In the case of exposure to the smoke generated during the intended use no specific measures are required. In case of unexpected effects consult a doctor.
Spillage 	Collect leaked product and place in containers for recovery or disposal Make sure the leakage area is well ventilated. The leaked product must not enter the sewer system or come into contact with surface water or ground water.
Transport 	Article so pack designed that any hazardous effects arising from the accidental functioning are confined within the package unless the package has been degraded by fire, in which case all blast or projection effects are limited to the extent that they not significantly hinder or prevent fire-fighting or other emergency response efforts in the immediate vicinity of the package.

Effectiveness of control measures
Likelihood of harmful exposure with existing control measures - LOW

Recommendations
None