

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

1. SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Strungbound 450, 225, 115

CAS No. Article. EC No. Article. REACH Registration No. None as

REACH Registration No. None assigned.

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

Identified Use(s) Pyrotechnic Special Effects. For use by persons with specialist knowledge only.

Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Company Identification Event Horizon Pyrotechnics Ltd

Address of Manufacturer The Old Brewery

Stagman Lane Ashcott Somerset

Postal code TA7 9QW

Telephone +44(0)1458 210280

Fax None.

E-mail info@precisionenergetics.co.uk

1.4 Emergency telephone number

Emergency Phone No. +44(0)1458 210280

Contact Event Horizon Pyrotechnics Ltd

National response center

Address National Poisons Information Service (Birmingham Centre)

City Hospital Dudley Road, Birmingham, United Kingdom

Emergency Phone No. +00 448 706 006 266 NHS Direct - 0845 4647 or 111

2. SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Regulation (EC) No. 1272/2008 (CLP) Expl. 1.4 :Fire or projection hazard.

2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name Strungbound 450, 225, 115

Hazard Pictogram(s)



GHS01

Signal Word(s) Warning.

Hazard Statement(s) H204: Fire or projection hazard.

Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P240: Ground and bond container and receiving equipment.

P250: Do not subject to grinding/shock/friction.

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P280: Wear protective gloves/protective clothing/eye protection/face

protection/hearing protection.

P370+P380+P375: In case of fire: Evacuate area. Fight fire remotely due to the risk

of explosion.

P501: Dispose of contents in accordance with local, state or national legislation.

Explosive Product Notice

PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES - The prevention of accidents in the use of explosives is a result of careful planning and observance of the best known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may

either kill or injure both him and his fellow workers.

2.3 Other hazards

Additional Information

None known.

2.4 Additional Information

WARNING - Use following consideration of the User Instructions. All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, DO NOT USE IT before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

3. SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product as supplied: Article.

Pyrotechnic article with hazardous components are black powder and an electric igniter.

3.1 Substances

Not applicable.

3.2 Mixtures

HAZARDOUS	CAS No.	EC No. / REACH	%W/W	Hazard Statement(s)	Hazard
INGREDIENT(S)		Registration No.			Pictogram(s)
Potassium nitrate	7757-79-1	231-818-8 01-2119488224-35-XXXX	40-85	Ox. Sol. 3 H272	GHS03
Sulphur	7704-34-9	231-722-6 01-2119455044-46-XXXX	6-27	Skin Irrit. 2 H315	GHS07

4. SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Unlikely route of exposure.

Skin Contact Wash hands and exposed skin after use.

Eye Contact Flush eyes with water for at least 15 minutes.

Ingestion Unlikely route of exposure.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

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5. SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media Extinguish preferably with dry chemical, alcohol foam or waterspray.

Unsuitable extinguishing media None known.

5.2 Special hazards arising from the substance or mixture

Fire or projection hazard. Decomposes in a fire giving off toxic fumes: Carbon

monoxide, Carbon dioxide, Nitrogen oxides, Sulphur oxides.

5.3 Advice for firefighters

Evacuate area. DO NOT fight fire when fire reaches explosives. Fight fire remotely with normal precautions due to the risk of explosion. Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

6. SECTION 6: ACCIDENTAL RELEASE MEASURES

It is unlikely to present spillage or leakage hazard. Anticipated release would only be from a damaged device.

6.1 Personal precautions, protective equipment and emergency procedures

Use non-sparking tools. Wear protective gloves/protective clothing/eye

protection/face protection/hearing protection.

6.2 Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3 Methods and material for containment and cleaning up

Consult the supplier for safe disposal of spillage waste and for decontamination of

spillage area.

6.4 Reference to other sections

See Also Section 8, 13

7. SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding/shock/friction. Store in accordance with local regulations. Ground and bond equipment and your person. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

7.2 Conditions for safe storage, including any incompatibilities

In accordance with local regulations. Do not store improperly with other explosives

(severe physical injury or death may occur from detonation).

Storage temperature Ambient

Storage life Stable under normal conditions.

Incompatible materials Acids, Alkalis.

7.3 Specific end use(s)

Pyrotechnic Special Effects. For use by persons with specialist knowledge only.

8. SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits No Occupational Exposure Limit assigned.

8.2 Exposure controls

8.2.1. Appropriate engineering controls Use non-sparking ventilation systems, approved explosion-proof equipment, and

intrinsically safe electrical systems. Ensure adequate ventilation. Handle in

accordance with good industrial hygiene and safety practice.

8.2.2. Personal protection equipment

Eye Protection Wear protective eyewear (goggles, face shield, or safety glasses).

Skin protection Wear fire resistant or flame retardant clothing.

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Respiratory protection No personal respiratory protective equipment normally required.

Damaged device: A suitable dust mask or dust respirator with filter type P (EN143 or

EN405) may be appropriate.

Thermal hazards Not applicable.

Additional Info

Additional Information Ear protection: Noise attenuating headset or ear plugs. 8.2.3. Environmental Exposure Controls Do not allow to enter drains, sewers or watercourses.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Article.

Black, string wound cylinder, containing black powder and an electric igniter.

Colour: Black (Powder.)

Odour Odourless.
Odour threshold Not established.
pH Black powder: Neutral.

Melting point/freezing point
Initial boiling point and boiling range
Flash Point
Evaporation rate
Flammability (solid, gas)
Upper/lower flammability or explosive
Not applicable.
Not applicable.
Not applicable.
Not applicable.

imits

Vapour pressure Not applicable. Vapour density Not applicable.

Density (g/ml)

Relative density

Black powder: 0.5-1.2 g/cm³

Relative density

Black powder: 1.0-1.9 g/cm³

Solubility(ies) Solubility (Water): 315 g/dm³ (Potassium nitrate).

Solubility (Other): Not known.

Partition coefficient: n-octanol/water Not available.

Auto-ignition temperature Not available.

Decomposition Temperature (°C) Black powder: 290-360° C

Viscosity Not applicable.

Explosive properties Fire or projection hazard.

Oxidising properties Oxidising (Potassium nitrate).

9.2 Other information

None.

10. SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Acids, Alkalis.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

11. SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Low acute toxicity.

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Skin corrosion/irritation Non-irritant.
Serious eye damage/irritation Non-irritant.

Germ cell mutagenicity

There is no evidence of mutagenic potential.

Carcinogenicity No evidence of carcinogenicity.

Reproductive toxicity
Lactation
STOT - single exposure
STOT - repeated exposure
Aspiration hazard
None anticipated.
None anticipated.
None anticipated.

11.2 Other information

None.

12. SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates Low toxicity to invertebrates.

Toxicity - Fish Low toxicity to fish.

Toxicity - Algae Low toxicity to algae.

Toxicity - Sediment Compartment Not classified.

Toxicity - Terrestrial Compartment 12.2 Persistence and Degradation

Not classified.

Not applicable.

12.3 Bioaccumulative potential

Not applicable.

12.4 Mobility in soil

Article: Insoluble in water.

12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

12.6 Other adverse effects

None.

13. SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of this material and its container to an approved waste disposal plant.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

14. SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 0431

14.2 UN proper shipping name

UN proper shipping name ARTICLES, PYROTECHNIC, FOR TECHNICAL PURPOSES

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class 1
ADR Classification Code 1.4G
Excepted Quantities E0
Mixed Packing Instructions for Packages
Mixed Packing Instructions for Packages MP23 MP24

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ADR Transport Category 2
Tunnel Restriction Code E
Special Provisions for Carriage - V2

Packages

Special Provisions for Carriage - Loading, CV1 CV2 CV3

Unloading and Handling

Special Provisions for Carriage - S1

Operation IMDG

IMDG Class1.4GExcepted QuantitiesE0Mixed Packing Instructions for PackagesP135IMDG EMSF-B, S-X

Stowage and Handling Category 02 SW1

ICAO/IATA

IATA Proper Shipping Name ARTICLES, PYROTECHNIC

Excepted Quantities E0

Passenger and Cargo Aircraft Limited Forbidden for transport by air.

Quantities Packing Instructions

Passenger and Cargo Aircraft Limited Forbidden for transport by air.

Quantities Max net Qty

Passenger and Cargo Aircraft Packing Forbidden for transport by air.

Instructions

Passenger and Cargo Aircraft Max net Forbidden for transport by air.

Qtv

Cargo Aircraft Packing Instructions 135
Cargo Aircraft Max net Qty 75Kg
Special Provisions A802
Emergency Response Guidebook (ERG) 1L

Code Labels

Labels 1.4

14.4 Packing group

Packing group 1.4G

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available

15. SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very Not listed.

High Concern for Authorisation

REACH: ANNEX XIV list of substances Not listed.

subject to authorisation

REACH: Annex XVII Restrictions on the Not listed.

manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed. Regulation (EC) N° 850/2004 of the Not listed.

European Parliament and of the Council

on persistent organic pollutants

Regulation (EC) N° 2037/2000 on Not listed.

substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the Not listed.

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European Parliament and of the Council concerning the export and import of hazardous chemicals

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

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16. SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS01

GHS03: GHS: flame over circle GHS07: GHS: exclamation mark

Hazard classification Ox. Sol. 3 : Oxidising solid, Category 3

Skin Irrit. 2: Skin corrosion/irritation, Category 2

Hazard Statement(s) H204: Fire or projection hazard.

H272: May intensify fire; oxidiser. H315: Causes skin irritation.

Precautionary Statement(s) P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P234: Keep only in original packaging.

P240: Ground and bond container and receiving equipment.

P250: Do not subject to grinding/shock/friction.

P280: Wear protective gloves/protective clothing/eye protection/face

protection/hearing protection.

P370+P372+P380+P373: In case of fire: Explosion risk. Evacuate area. DO NOT

fight fire when fire reaches explosives.

P370+P380+P375: In case of fire: Evacuate area. Fight fire remotely due to the risk

of explosion.

P401: Store products enclosed, in original packing.

P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms ADN: European Agreement concerning the International Carriage of Dangerous

Goods by Inland Waterways

ADR: European Agreement concerning the International Carriage of Dangerous

Goods by Road

CAS: Chemical Abstracts Service

CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of

substances and mixtures
DNEL : Derived No Effect Level
EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA: International Air Transport Association

IBC: Intermediate Bulk Container

ICAO : International Civil Aviation Organization

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IMDG: International Maritime Dangerous Goods

LTEL: Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit STOT: Specific Target Organ Toxicity

UN: United Nations

vPvB : very Persistent and very Bioaccumulative

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