

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product identifiers

Product name : **Activated EXXFIRE® GEN09N2 Cool Gas Generator**

Chemical name and formula: An activated Cool Gas Generator contains dry material consisting of sand, sodium, iron oxide and various lithium and fluoride containing compounds.

Wastes are exempt from registration in accordance with REACH regulation. There is no registration number available.

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

Product is a residual/conversion product after activation of a fire extinguishing device releasing nitrogen. Product contains residual substances and a polluted sand filter inside.

1.3 Details of the supplier of the datasheet

Company : ExxFire BV
Keyserswey 30
Noordwijk - 2201 CW
THE NETHERLANDS
Telephone : +31 85 4017970
E-mail address : info@exxfire.com

1.4 Emergency telephone number

Emergency phone # : +31 30 274 88 88 National Poisonings Information Centre (The Netherlands).

2 HAZARDS IDENTIFICATION

The activated article contains sand, sodium and various other toxic and non-toxic components. Through normal or reasonably foreseeable conditions of use and handling including proper disposal these cannot be released.

2.1 Classification of the article

Article containing dangerous goods. GHS-classification system is as follows: the article does not need classification.

2.2 Classification of the content

In normal use, the content of the device cannot be released.

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.3 Label elements

2.3.1 Content

Pictograms :



GHS02



GHS05



GHS06

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Signal word : Danger

Precautionary statement(s)

P202 Do not handle until all safety precautions have been read and understood.
 P210 Keep away from heat/sparks/open flames/hot surfaces – No smoking.
 P222 Do not allow contact with air.
 P223 Keep away from any contact with water, because of violent reaction and possible flash fire.
 P232 Protect from moisture.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 IF IN EYES: Remove contact lenses, if present and easy to do. Rinse cautiously with water for several minutes.
 P234 Keep only in original container.
 P273 Avoid release to the environment.
 P501 Dispose of contents/ container to an approved waste disposal plant.

Other Hazards

Risk of burn injuries in case of direct contact with the surface of the generator still warm after activation.

Do not handle device shortly after ignition because of liquid sodium in device.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Article

The chemical part of the device contains the in this chapter mentioned components. Devices shall only be opened during proper disposal. There is no risk to be exposed to the contents of the generator, except in cases of loss of closure due to mechanical stress.

3.2 Content

Not all contaminants present are listed, but a selection of health-relevant and environmental pollutants are included.

<i>Ingredient</i>	<i>Percentage (%)</i>	<i>Symbols</i>	<i>H-phrase(s)</i>
Sodium	-	GHS02, GHS05	260: in contact with water releases flammable gases which may ignite spontaneously. 314: Causes severe skin burns and eye damage EUH014: Reacts violently with water
Lithium fluoride	-	GHS06	301: Toxic if swallowed 319: Causes serious eye-irritation EUH032: In contact with acids highly toxic gases are released
Iron compounds	-	-	315: Causes skin irritation 319: Causes serious eye-irritation 335: Causes serious eye-irritation
Potassium compounds	-	GHS05	302: Harmful if swallowed 314: Causes severe skin burns and eye damage 332: Harmful if inhaled
Silica compounds	-	-	319: Causes serious eye-irritation 335: May cause respiratory irritation 373: May cause damage to organs through prolonged or repeated exposure

For the full text of the H-Statements mentioned in this Section, see Section 16.

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4 FIRST AID MEASURES

When content is not exposed, no risks or injuries are expected. First aid measures are based on contact with the content after breaking or opening of an activated device.

4.1 Description of first aid measures

In general, in case of doubt or if symptoms persist, always call a physician. Never give anything by mouth to an unconscious person.

If inhaled

- Bring victim to well ventilated area.
- Let victim rest in a half-seated position.
- Immediately consult a physician.

In case of skin contact

- Remove contaminated clothes.
- Remove metal particles with a dry forceps.
- Rinse with water for a minimum of 15 minutes.
- Immediately consult a physician.

In case of eye contact

- Rinse immediately with plenty of water for at least 15 minutes.
- Remove metal particles with a dry forceps, if possible.
- Immediately consult a physician.

If swallowed

- Rinse mouth immediately with water, in case the victim is conscious
- Let victim rest.
- DO NOT induce vomiting.
- DO NOT let victim drink.
- Immediately consult a physician.

5 FIRE-FIGHTING MEASURES

When content is not exposed, no risks or injuries are expected. Fire-fighting measures are based on contact with the content after breaking or opening of an activated device.

5.1 Extinguishing media

In case of fire, use dry chemical, heat-resistant foam or dry sand for extinction. **Do not use water!**

5.2 Special hazards arising from the substance or mixture

Highly flammable in presence of moisture. Flammable in presence of open flames and sparks and in the presence of heat. In case of fire toxic gases will be emitted.

5.3 Special protective equipment for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

In case of breaking or opening of a generator, evacuate people from the contaminated area and provide maximum ventilation. Eliminate all sources of ignition.

6.1 Personnel precautions, protective equipment and emergency procedure

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Wear gloves, full suit, face-protection, respiratory protection (**B-P3**). Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personnel protection see Sections 7 and 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Stop further leakage or spillage if safe to do so. Do not touch spilled material. Cover with mineral oil, dry earth, sand or other non-combustible material. Eliminate all ignition sources.

Call for assistance on disposal. Pick up and arrange disposal without creating dust. Sweep and shovel. Do not flush with water. Keep under mineral oil in suitable closed container for disposal. Store container in a well-ventilated area away from water or moisture and other chemicals.

6.4 Reference to other sections

For disposal see Section 13.

7 HANDLING AND STORAGE

The generators are hermetically sealed off from the environment. The content cannot be released under normal or reasonably foreseeable conditions of use including proper disposal if they are used in accordance with the manufacturer's recommendations.

7.1 Precautions for safe handling

The residual products within the generator are safely contained in normal condition of use. Do not open, drill, incinerate, crush, immerse, or expose to temperatures above the operating temperature range reported for products.

Avoid all possible contact with the content of the device.

7.2 Conditions for safe storage

Store in clean and dry area, between 15°C and 40°C.

7.3 Incompatibility

Store away from water and sources of heat. Store in a cool place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Not applicable.

8.2 Exposure control

8.2.1 Article

Appropriate engineering controls

Wash hands before breaks and immediately after handling the product.

Personal protective equipment

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Wear safety shoes.



8.2.2 Content

Eye/face protection

Wear appropriate protective eyeglasses or chemical safety glasses.

Respiratory protection

When exposure limits are exceeding or if irritation or other symptoms are experienced, use an adequate respiratory protection (combination filter B-P3, colourcode grey-white). Use independent breathing apparatus (?) for concentrations above the usage limits for filter devices, for oxygen concentrations below 17% volume, or in circumstances which are unclear.

Skin protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Article

Appearance

Odor	None
Form	Metal casing containing a solid block.
Color	Metal.

9.2 Content

Safety data

Flammability	Content contains flammable solid.
Incompatibility	See Section 7.3.
Decomposition gasses	Highly reactive with oxidizing agents, acids, moisture. The product reacts violently with water to emit flammable (hydrogen) and toxic gases.

10 STABILITY AND REACTIVITY

10.1 Chemical stability

Stable under recommended storage conditions.

10.2 Conditions to avoid

Do not allow water to enter container.

10.3 Materials to avoid

After activation of the device, avoid any contact with water.

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10.4 Hazardous decomposition products

Sodium slag. See section 9.2.

11 TOXICOLOGICAL INFORMATION**11.1 Toxicity of the content**

Component	Acute toxicity (LD50, oral) (mg/kg)	Effects of exposure
Sodium	No information available	Product is a corrosive material. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation.
Lithium fluoride	143	Shortness of breath, headache, nausea, vomiting, large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances.
Silica compounds	No information available	Prolonged or repeated inhalation of crystalline silica causes lung diseases.
Potassium compounds	No information available	

11.3 Article

When used properly, no health effects are expected.

12 ECOLOGICAL INFORMATION**12.1 Toxicity**

Sodium slag is highly reactive to water.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

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13 DISPOSAL CONSIDERATIONS

13.1 Product

The generators, after deployment, shall be treated as hazardous goods.

Observe all federal, state, and local environmental regulations. Contact EXXFIRE for recycling of used products.

13.2 Contaminated packaging

Contact EXXFIRE for recycling of used products.

14 TRANSPORT INFORMATION

ADR/RID – EXEMPT Paragraph 2.2.9.1.14

UN-Number: 3363 Class: 9 Packaging group: III
Proper shipping name: DANGEROUS GOODS IN APPARATUS

IMDG

UN-Number 3363 Class: 9 Packaging group: III
Proper shipping name: DANGEROUS GOODS IN APPARATUS

IATA

UN-Number: 3363 Class: 9 Packaging group: III
Proper shipping name: DANGEROUS GOODS IN APPARATUS

15 REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the article

No data available.

15.2 Chemical safety assessment

No data available.

16 OTHER INFORMATION

Text of H-code(s), as mentioned in Section 2 and 3

EUH014	Reacts violently with water.
EUH032:	In contact with acids highly toxic gases are released
H228	Flammable solid.
H242	Heating may cause a fire.
H250	Catches fire spontaneously if exposed to air.
H260	In contact with water releases flammable gases which may ignite spontaneously.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

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H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Further information

The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions.

It does not represent any guarantee of the properties of the product. ExxFire BV shall not be liable for any damage resulting from handling or from contact with the above product.