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| Document No.: | <b>2130319</b> |                          |
| Dokument Nr.: | <b>2130319</b> |                          |
| Version:      | <b>1</b>       | Date:                    |
| Versjon:      |                | Date: <b>16 Jun 2020</b> |

Document type / Dokumenttype:

## Safety Data Sheet

Title / Tittel:

### SDS-20mm LP Flare Ignition Pellet\_Nammo\_LTI\_engelsk

Project / Prosjekt:

### NARA

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|---|--|---|
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## CHANGE RECORD

| Version | Page / Paragraph | Description               |
|---------|------------------|---------------------------|
| 1       |                  | New document in Windchill |
|         |                  |                           |

## 1. IDENTIFICATION OF PRODUCT AND MANUFACTURER

### 1.1 Identification of product

20 mm LP Flare Ignition Pellet

### 1.2 Identified uses

This article is intended to be used for ignition of gas in Flare Gas System on oil and gas installations.

### 1.3 Manufacturer

Nammo Raufoss AS  
P.O. Box 162  
NO-2831 Raufoss  
NORWAY

Phone: +47 61 15 36 50

### 1.4 Supplier

LifeTime Ignition (LTI)  
Kokstadflaten 35  
5257 Kokstad, Bergen  
NORWAY

Phone: +47 47618096  
Mail: sales@lifetimeignition.com

### 1.5 Emergency telephone

Emergency telephone number in case of transport accidents:  
+47 907 65 356

Emergency telephone number in all other cases:  
+47 907 65 356



## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of product

Not applicable to articles/complex objects according to Regulation (EC) No 1272/2008.

### 2.2 Labelling

Not applicable to articles/complex objects according to Regulation (EC) No 1272/2008.

### 2.3 Other Hazards

#### 2.3.1 Safety Hazards

Ignition Pellet might decrepitate due to fire or extreme impact.

#### 2.3.2 Health and environmental hazards

Damage of a decrepitation will mainly be limited to the packaging.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

SVHC (list of candidates): The product contains no or less than 0.1 wt % of listed substances.

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

#### 4.1.1 Skin contact

Skin exposed to sparks: Cool-down the exposed area, apply ointment for burns if necessary.

## 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Fire in connection with explosives in fire group 4 shall be fight with all available extinguishing media.

### 5.2 Special hazards from the product

Pyrotechnic substances; fire, blast or projection hazard. Stop all persons entering the area and evacuate the area surrounding the site of the fire.  
Contact the police and fire service immediately

### 5.3 Advice for fire-fighters

If packaging or pellets are exposed to fire, there are no danger for mass explosion, but if the container are exposed to heat over longer time, the single parts can react and may give fragments.

Shields in front of face and normal firefighting equipment will give good protection. Cover shall be used, but if this is not possible the firefighting personnel shall not move closer than 25 m. Other personnel shall move 100 m away.  
Both distances given are in accordance with Transport Emergency Card for ADR Class 1.4S

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Emission to sea/water

Try to collect pellet from sea or water if possible. If the pellet has been in contact with water it should be returned for destruction.

### 6.2 Emission on land

Try to collect or remove pellet. Pellet exposed to drop should be returned for destruction.

## 7. HANDLING AND STORAGE

### 7.1 Handling

Keep away from fire.

Avoid impact (drop resistance is tested with 1.5 kg dropped from 2.5 m).

The pellets shall always be handled with care to prevent damage of the pellet itself, the packaging, the markings and the surface treatment.

### 7.2 Conditions for safe storage, including any incompatibilities

The pellets shall be stored in a safe place avoiding extreme temperatures and humidity. The pellets shall always be stored in the original packaging. (See specification below).

- Storage of Ignition pellets to be in original packing unopened
- To allow air circulation it should be min 10 cm opening to the ground, 40 cm to wall and ceiling.
- Storage temperature must not go beyond – 30 °C and + 50 °C
- Relative humidity must not go beyond 80 %. Shelf life for pellets is 10 years based on above storage specifications.

Stored quantity shall be in accordance with applicable national regulations.

### 7.3 Specific use

The safety clips shall always be in place during all handling of fuzes, assembly and packing.

**If the safety clips have been removed and a red background is visible in the hole behind the safety clips, the Flare Ignition Pellet is armed and dangerous to handle.**

The safety clips shall be removed prior to launching.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

No special requirements for a complete sealed pellet when handling.

## 8.2 Exposure controls

### 8.2.1 Personal protective equipment

Not applicable

## 8.3 Environmental exposure control

Not applicable

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General information

Appearance: The 20 mm LP Flare Ignition Pellet is a Flare Ignition Pellet filled with a Flare Ignition Charge and an Incendiary element of Zirconium

Colour: Aluminium body with gold tip

Odour: None

### 9.2 Other information

#### 9.2.1 Self-ignition temperatures

The lowest self-ignition temperature of any of the components used in this product is  $> 400\text{ }^{\circ}\text{C}$

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity

None

### 10.2 Chemical stability

Stabile under the prescribed storage conditions

### 10.3 Possibility of hazardous reactions

No dangerous reactions known

## 10.4 Conditions to avoid

High temperatures (over +65°C), humidity (over 65 %) and all sources of ignition should be avoided

## 10.5 Incompatible materials

Not applicable for packed or intact pellets

## 10.6 Hazardous decomposition products

Hydrogen chloride (HCl) (g). Potassium oxide (s)

## 11. TOXICOLOGICAL INFORMATION

|                          |  |
|--------------------------|--|
| Sensitizing:             | No allergenic properties known.  |
| Carcinogenic properties: | No carcinogenic properties known.  |
| Re-production toxicity:  | No damaging effects on re-production ability, fertility or embryogeny known. |
| Inhalation:              | No specific health risk stated.  |
| Contact with skin:       | No specific health risk stated.  |
| Contact with eyes:       | No specific health risk stated.  |

## 12. ECOLOGICAL INFORMATION

In general: The product shall not be marked as environmentally dangerous in accordance with applicable regulations. This does not exclude that random larger emissions or frequently minor emissions can have disturbing influence on the environment.

## 13. DISPOSAL CONSIDERATIONS

|                  |   |
|------------------|---|
| Used Pellet:     | Not considered as hazardous disposal.   |
| Damaged Pellets: | Damaged pellets shall be repacked in their original packaging and returned to Nammo AS for destruction. |



## 14. TRANSPORT INFORMATION

|  |                             |
|--|-----------------------------|
| UN No.                                     | 0432                        |
| Proper shipping name                       | Articles, pyrotechnic       |
| Class / Division                           | 1.4                         |
| Compatibility group                        | S                           |
| Packing group                              | NA                          |
| Outer packaging (transport container)      | M2A1 metal container        |
| Transport container certification No.      | NET2701A / NET2701B         |
| Transport container UN no                  | 4A/Y23/S/YR/N/NET2701X - ID |
| Classification certification reference No. | DBE 02/008-TR               |

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations for the product

This safety data sheet is prepared according to COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

## 16. OTHER INFORMATION

Packaging: P135  
 Inner: Wooded receptacle (intermediate on top) with drilled holes for 32 ea. Pellets, placed on solid wood bottom receptacle  
 Intermediate: Not Applicable  
 Outer: Steel box M2A1 containing one complete receptacle

The packaging shall be approved in accordance with UNRTDG-MR Part 6; ADR Part 6; RID Part 6; IMDG Code Vol. I Part 6; ICAO-TI Part 6.

Technical point of contact:

Name: Magne Myrvang  
 Phone: +47 990 36 583  
 E-mail: [magne.myrvang@nammo.com](mailto:magne.myrvang@nammo.com)

Name: Øystein Ytrearne  
 Phone: +47 476 18 096  
 E-mail: [ytrearne@lifetimeignition.com](mailto:ytrearne@lifetimeignition.com)

## Note

The technical information provided in this safety data sheet should only be used for the purposes of assessing hazards with respect to safety, health or environment. It should not be used as a technical specification or for engineering calculations.

The user of this product should make independent determinations of safety measures and procedures concerning all product use, either alone or in combination with other products, taking into account the data contained in this safety data sheet. The user of this product should also transmit for all users and handlers the suitable safety instructions and precautions regarding the risks mentioned in all documentation concerning product operation.

The information contained in this safety data sheet is based on the present state of the art for the concerned product, at the date of issue. All information herewith is provided in good faith and is intended to describe the product for purposes of safety, health and environmental requirements only. It is not intended, and should not be construed as a warranty. Nammo Raufoss AS should be consulted for further information.

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