




**N-Powder High Energy, N500-series (RELO)
N515, N526, N530, N540, N550, N555, N560, N565, N568,
N570**

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

- 1.1 Product identifier:** N-Powder High Energy, N500-series (RELO)
N515, N526, N530, N540, N550, N555, N560, N565, N568, N570
- Other means of identification:**
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: Manufacturing and use of explosives
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**
Nammo Vihtavuori Oy
Ruutitehtaantie 80
41330 Vihtavuori - Finland
Phone: +358 10 523 3140
info@vihtavuori.com
www.nammo.com
- 1.4 Emergency telephone number:** Emergency telephone number Europe: 112

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
CLP Regulation (EC) No 1272/2008:
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.
Acute Tox. 3: Acute toxicity, Category 3, H301+H311
Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Expl. 1.4: Explosives, Category 1.4, H204
STOT RE 2: Specific target organ toxicity — Repeated exposure, Hazard Category 2, H373
- 2.2 Label elements:**
CLP Regulation (EC) No 1272/2008:
Danger

Hazard statements:
Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Expl. 1.4: H204 - Fire or projection hazard.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements:
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.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection.
P370+P372+P380+P373: In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P373: DO NOT fight fire when fire reaches explosives.
P401: Store in accordance with specifications.
P501: Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.
- 2.3 Other hazards:**
Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.
May form explosible dust-air mixture if dispersed

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 9004-70-0 EC: 682-719-5 Index: 603-037-00-6 REACH: Non-applicable	Cellulose nitrate⁽¹⁾ Self-classified	80 - <99 %
	Regulation 1272/2008 Expl. 1.3: H203 - Danger	
CAS: 55-63-0 EC: 200-240-8 Index: 603-034-01-7 REACH: 01-2119488893-18-XXXX	Glycerol trinitrate⁽²⁾ Self-classified	5 - <20 %
	Regulation 1272/2008 Acute Tox. 1: H310; Acute Tox. 2: H300+H330; Aquatic Chronic 2: H411; Expl. 1.1: H201; STOT RE 2: H373 - Danger	
CAS: 13114-72-2 EC: 236-039-7 Index: Non-applicable REACH: 01-2120751244-60-XXXX	3-methyl-1,1-diphenylurea⁽²⁾ Self-classified	1 - <3 %
	Regulation 1272/2008 Acute Tox. 4: H302; Aquatic Chronic 3: H412; STOT RE 2: H373 - Warning	

⁽¹⁾ Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2020/878

⁽²⁾ Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

Request medical assistance immediately, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Induce vomiting (ONLY IF PERSON IS CONSCIOUS!) and then ingest large quantities of liquid to dilute the toxin. Keep the person affected at rest.

4.2 Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

The product's combustion gases contain nitrogen oxides (NOx), the effects of which may not begin until several hours after exposure. Patients who have inhaled flammable gases should be monitored for at least 48 hours after exposure.

4.3 Indication of any immediate medical attention and special treatment needed:

Non-applicable

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

If possible, use water jet to extinguish the fire, or alternatively use ABC powder, foam or carbon dioxide extinguishers (CO₂).

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

WARNING! Fire or projection hazard. In case of fire follow the instructions on the Internal Emergency Plan

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

Burns without external oxygen. The combustion of gunpowder is flammable and can turn into an explosion. If a fire threatens to spread to an area with gunpowder, the area must be evacuated to a safe distance and focus on preventing the fire from spreading.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Sweep up and shovel product or collect by other means and place in container for disposal

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

Other information:

Collect leaking product in containers for disposal. Use non-sparking tools and prevent the formation of static electricity. Eliminate all ignition sources.

ATTENTION: Never use damaged or spilled explosives!

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

Other information:

Collect product in containers regarding precautions and dispose of.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Collect product in containers regarding precautions and dispose of.

Other information:

ATTENTION: Never use damaged or spilled explosives!

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

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SECTION 7: HANDLING AND STORAGE (continued)

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and destroy using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Due to its inflammable nature, the product does not present a fire risk under normal conditions of storage, handling and use.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Preferably use aspiration for cleaning. Given the danger of the product by inhalation, any cleaning method that involves exposure to the product in this way (sweeping, etc.) is not recommended

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

Other information:

Store in original container. Keep in a dry, cool place. Incompatible with acids and bases.

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)	0,01 ppm	0,095 mg/m ³
Glycerol trinitrate CAS: 55-63-0 EC: 200-240-8	IOELV (STEL)	0,02 ppm	0,19 mg/m ³

Nuisance dust: Inhalable dust 10 mg/m³ // Respirable dust 4 mg/m³

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Glycerol trinitrate CAS: 55-63-0 EC: 200-240-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	2,5 mg/kg	Non-applicable	0,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable
3-methyl-1,1-diphenylurea CAS: 13114-72-2 EC: 236-039-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,167 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,114 mg/m ³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Glycerol trinitrate CAS: 55-63-0 EC: 200-240-8	Oral	Non-applicable	Non-applicable	0,5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable

PNEC:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
Glycerol trinitrate CAS: 55-63-0 EC: 200-240-8	STP	Non-applicable	Fresh water	0,02 mg/L
	Soil	Non-applicable	Marine water	Non-applicable
	Intermittent	0,02 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable
3-methyl-1,1-diphenylurea CAS: 13114-72-2 EC: 236-039-7	STP	10 mg/L	Fresh water	0,02 mg/L
	Soil	Non-applicable	Marine water	Non-applicable
	Intermittent	0,204 mg/L	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable



8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment



In accordance with the order of importance to control professional exposure (Directive 98/24/EC) it is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding the occupational exposure limits. In case of using personal protective equipment it should have CE marking in accordance with Directive 2016/425/EC. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For additional information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Compulsory use of face mask	Filter mask for particles (Filter type: FFP3)		EN 149:2001+A1:2009	Replace when an increase in resistance to breathing is observed.

C.- Specific protection for the hands



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks			Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory complete body protection	Antistatic and fireproof protective clothing		EN 1149-1:2006 EN 1149-2:1997 EN 1149-3:2004 EN 168:2002 EN ISO 14116:2015 EN 1149-5:2018	Limited protection against flames.



F.- Additional emergency measures

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 °C: Solid
 Appearance: Cylindrical grains
 Colour: Black, Grey
 Odour: Odourless
 Odour threshold: Non-applicable *

Volatility:

Boiling point at atmospheric pressure: Non-applicable *
 Vapour pressure at 20 °C: Non-applicable *
 Vapour pressure at 50 °C: Non-applicable *
 Evaporation rate at 20 °C: Non-applicable *

Product description:

Density at 20 °C: Non-applicable *
 Relative density at 20 °C: Non-applicable *
 Dynamic viscosity at 20 °C: Non-applicable *
 Kinematic viscosity at 20 °C: Non-applicable *
 Kinematic viscosity at 40 °C: Non-applicable *
 Concentration: Non-applicable *
 pH: Non-applicable *
 Vapour density at 20 °C: Non-applicable *
 Partition coefficient n-octanol/water 20 °C: Non-applicable *
 Solubility in water at 20 °C: Non-applicable *
 Solubility properties: Soluble in organic solvents
 Decomposition temperature: Non-applicable *
 Melting point/freezing point: Non-applicable *

Flammability:

Flash Point: Non-applicable
 Flammability (solid, gas): Non-applicable *
 Autoignition temperature: 170 °C
 Lower flammability limit: Non-applicable *
 Upper flammability limit: Non-applicable *

Explosive (Solid):

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Lower explosive limit: Non-applicable *

Upper explosive limit: Non-applicable *

Particle characteristics:

Median equivalent diameter: Non-applicable *

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties: H204 Fire or projection hazard.

Oxidising properties: Non-applicable *

Corrosive to metals: Non-applicable *

Heat of combustion: Non-applicable *

Aerosols-total percentage (by mass) of flammable components: Non-applicable *

Other safety characteristics:

Surface tension at 20 °C: Non-applicable *

Refraction index: Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Fire or projection hazard	Not applicable	Precaution	Avoid direct impact	Not applicable

Prolonged temperature stress causes a decrease in stability.

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

Other information:

Both acids and bases cause decomposition of the gunpowder. Decomposition can be violent and lead to an explosion.

10.6 Hazardous decomposition products:

See sections 10.3, 10.4 and 10.5 for a detailed description of the degradation products. Depending on the decomposition conditions, the decomposition may release complex mixtures of chemical substances: Nitrogen oxides (NO_x), carbon dioxide (CO₂), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

A- Ingestion (acute effect):

- Acute toxicity : Can be fatal if consumed. For more information see section 2.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Can be fatal if the product is absorbed through the skin. For more information on the secondary effects of skin contact see section 2.
- Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
IARC: Non-applicable
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
Cellulose nitrate CAS: 9004-70-0 EC: 682-719-5	>2000 mg/kg	>2000 mg/kg	
		>5 mg/L	
Glycerol trinitrate CAS: 55-63-0 EC: 200-240-8	5 mg/kg	5 mg/kg	
		0,05 mg/L (ATEi)	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
	LD50 oral	500 mg/kg (ATEI)	
3-methyl-1,1-diphenylurea	LD50 dermal	>2000 mg/kg	
CAS: 13114-72-2	LC50 inhalation	>5 mg/L	
EC: 236-039-7			

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
	LC50	>1 - 10 mg/L (96 h)		
Glycerol trinitrate	EC50	>1 - 10 mg/L (48 h)		Fish
CAS: 55-63-0	EC50	>1 - 10 mg/L (72 h)		Crustacean
EC: 200-240-8				Algae
3-methyl-1,1-diphenylurea	LC50	>10 - 100 mg/L (96 h)		Fish
CAS: 13114-72-2	EC50	>10 - 100 mg/L (48 h)		Crustacean
EC: 236-039-7	EC50	>10 - 100 mg/L (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
	NOEC	0,12 mg/L		
Glycerol trinitrate	NOEC <th>3,23 mg/L</th> <td>Pimephales promelas</td> <td>Fish</td>	3,23 mg/L	Pimephales promelas	Fish
CAS: 55-63-0 EC: 200-240-8			Ceriodaphnia dubia	Crustacean

12.2 Persistence and degradability:

Not available

12.3 Bioaccumulative potential:

Not available

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
	Koc	500	Henry	Non-applicable
Glycerol trinitrate	Conclusion	Low	Dry soil	Non-applicable
CAS: 55-63-0	Surface tension	4,951E-2 N/m (25 °C)	Moist soil	Non-applicable
EC: 200-240-8				

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Type of waste (Regulation (EU) No 1357/2014):

HP1 Explosive, HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP6 Acute Toxicity

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:



- 14.1 UN number or ID number:** UN0509
- 14.2 UN proper shipping name:** POWDER, SMOKELESS
- 14.3 Transport hazard class(es):** 1
Labels: 1.4C
- 14.4 Packing group:** N/A
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
Special regulations: Non-applicable
Tunnel restriction code: E
Physico-Chemical properties: see section 9
Limited quantities: 0
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:



- 14.1 UN number or ID number:** UN0509
- 14.2 UN proper shipping name:** POWDER, SMOKELESS
- 14.3 Transport hazard class(es):** 1
Labels: 1.4C
- 14.4 Packing group:** N/A
- 14.5 Marine pollutant:** No
- 14.6 Special precautions for user**
Special regulations: Non-applicable
EmS Codes: F-B, S-Y
Physico-Chemical properties: see section 9
Limited quantities: 0
Segregation group: Non-applicable
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:

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SECTION 14: TRANSPORT INFORMATION (continued)



- 14.1 UN number or ID number:** UN0509
- 14.2 UN proper shipping name:** POWDER, SMOKELESS
- 14.3 Transport hazard class(es):** 1
Labels: 1.4C
- 14.4 Packing group:** N/A
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**
Physico-Chemical properties: see section 9
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable
 Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
 Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable
 Article 95, REGULATION (EU) No 528/2012: Non-applicable
 REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Section	Description	Lower-tier requirements	Upper-tier requirements
P1b	EXPLOSIVES	50	200

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

Texts of the legislative phrases mentioned in section 2:

- H204: Fire or projection hazard.
- H373: May cause damage to organs through prolonged or repeated exposure.
- H412: Harmful to aquatic life with long lasting effects.
- H301+H311: Toxic if swallowed or in contact with skin.

Texts of the legislative phrases mentioned in section 3:

- CONTINUED ON NEXT PAGE -



**N-Powder High Energy, N500-series (RELO)
N515, N526, N530, N540, N550, N555, N560, N565, N568,
N570**

SECTION 16: OTHER INFORMATION (continued)

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) No 1272/2008:

- Acute Tox. 1: H310 - Fatal in contact with skin.
- Acute Tox. 2: H300+H330 - Fatal if swallowed or if inhaled.
- Acute Tox. 4: H302 - Harmful if swallowed.
- Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
- Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
- Expl. 1.1: H201 - Explosive, mass explosion hazard.
- Expl. 1.3: H203 - Explosive, fire, blast or projection hazard.
- STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

- <http://echa.europa.eu>
- <http://eur-lex.europa.eu>

Abbreviations and acronyms:

- ADR: European agreement concerning the international carriage of dangerous goods by road
- IMDG: International maritime dangerous goods code
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organisation
- COD: Chemical Oxygen Demand
- BOD5: 5day biochemical oxygen demand
- BCF: Bioconcentration factor
- LD50: Lethal Dose 50
- LC50: Lethal Concentration 50
- EC50: Effective concentration 50
- LogPOW: Octanolwater partition coefficient
- Koc: Partition coefficient of organic carbon
- UFI: unique formula identifier
- IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -