

VihtaVuori

VihtaVuori N500 Series
SAFETY DATA SHEET
June 2017

The following **N500** series powders are manufactured by VihtaVuori®
and distributed by Hodgdon Powder Company.

N530
N540
N550
N560
N570

1.4C EX Approval= (EX-2015050310)
ONLY APPROVED for 1 lb. container as a 1.4C

Date:18.2.2014

Former date:

Trade name / Substance name: HIGH ENERGY-POWDER

X SAFETY DATA SHEET

(INFORMATION FORM FOR CHEMICALS DATA)

(*) concerns only chemical notification

(**) either 3.1 or 3.2 must be filled

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

1.1 Product identifier

Trade name / Substance name

HIGH ENERGY-POWDER

Company product code

N500-series powders

REACH Registration number

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

The uses of the chemical

Propellant for ammunition

Classification of economic activities (NACE) (*)

24610

Use categories (UC62) (*)

TOL1:296KT1:36

The chemical can be used by the general public (*)

The chemical is used by the general public only (*)

1.3 Details of the supplier of the Safety Data Sheet

Supplier (manufacturer, importer, only representative, downstream user, distributor)

Responsible for placing a chemical on the market in Finland (*)

Nammo Vihtavuori Oy

Street address

Ruutitehtaantie 80

Postcode and post office

41330 Vihtavuori

Post-office box

Postcode and post office

Telephone number

+358 14 3779 211

Telefax

+358 14 3779 613

E-mail address

Finnish Business ID (Y code) (*)

FI14922233

1.4 Emergency telephone number

Telephone number +358-14-3779211

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Explosive; fire, blast or projection hazard.

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1272/2008 (CLP)
 Expl. 1.3, H203
 67/548/EEC-1999/45/EC
 E, Xn; R1

2.2 Label elements

Powder, smokeless
 1272/2008 (CLP)
 GHS01



Signal word DANGER

P 201, Keep away from heat / sparks / open flames / hot surfaces. –No smoking.

P 240, Ground / bond container and receiving equipment.

P 250, Do not subject to grinding / shock / friction.

P 370+ P 380, In case of fire: Evacuate area.

P 373, DO NOT fight fire when it reaches explosives.

P 401 Store in original container. Keep in a dry, cool place. Incompatible with acids and bases.

P 501, Dispose of contents/container in accordance with local / regional / national / international regulations.

2.3 Other hazards**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS****3.1 Substances (**)**

Main constituent / constituent	CAS-, EC- or index number	Concentration

3.2 Mixtures ()**

Substance name	CAS-, EC- or index number	REACH Registration No.	Concentration	Classification
Nitrosellulose (>12.6%)	603-037-00-6		< 90 %	Expl. 1.1, H201
N-methyl-N,N-diphenylurea (Akardite II)	13114-22		< 3 %	Xn; R22
Nitroglycerin	55-63-0		< 30 %	Unst. Expl. H200 Acute Tox. 2 *, H330 Acute Tox. 1, H310 Acute Tox. 2 *, H300 STOT RE 2 *, H373 Aquatic Chronic 2, H411

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation: Fresh air, Rinse nose, mouth and throat with water.
 Skin contact: Wash with soap and water.
 Eye contact: Rinse carefully with water.

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Ingestion: Rinse the mouth with water. Give a few glasses of milk or water if the person is fully conscious and try to cause vomiting.

4.2	Most important symptoms and effects, both acute and delayed
	The most important known symptoms and effect specified in the labeling.
4.3	Indication of any immediate medical attention and special treatment needed
	Treatment: according to symptoms, no known specific antidote.
SECTION 5: FIREFIGHTING MEASURES	
5.1	Extinguishing media
	Recommended water. Also other endothermic extinguishing media are possible.
5.2	Special hazards arising from the substance or mixture
	In case of fire and/or explosion do not breathe fumes which may contains nitrogen oxides (NOx). Evacuate personnel to safe areas.
5.3	Advice for firefighters
	Can only be extinguished by effective cooling. Burns without auxiliary oxygen. Very fast, deflagration like burning, may turn to explosion. At risk of fire people shall be evacuated to a safe distance
SECTION 6: ACCIDENTAL RELEASE MEASURES	
6.1	Personal precautions, protective equipment and emergency procedures
	Avoid contact with skin and eyes. Use personal protective equipment in case of contact and/or inhalation of the product.
6.2	Environmental precautions
	Prevent the product from entering drains.
6.3	Methods and material for containment and cleaning up
	Avoid creating dust by moistening the product, sweep up and put in labelled containers. Should be destroyed by authorized personnel in an approved location. NOTE! Explosives can detonate.
6.4	Reference to other sections
SECTION 7: HANDLING AND STORAGE	
7.1	Precautions for safe handling
	Equipment must be adapted to work with explosives. Avoid spillage.
7.2	Conditions for safe storage, including any incompatibilities
	Store in original container. Keep in a dry, cool place. Incompatible with acids and bases.
7.3	Specific end use(s)
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION	
8.1	Control parameters
	National occupational exposure limit values
	Threshold limit value is missing. A guideline value of dust 10 mg/m ³ can be used.
	Other limit values
	DNEL
	PNEC
8.2	Exposure controls
	Appropriate engineering controls

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Workplace and methods should be developed to prevent contact with the product.

Eye / face protection

Wear safety glasses when product can irritate eyes.

Skin protection

Flame retardant treated clothing should be used when working with the product.

Hand protection

Rubber gloves in case of direct contact can irritate eyes.

Respiratory protection

Use respiratory equipment with particle filter P3

Thermal hazards**Environmental exposure controls**

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES	
9.1 Information on physical and chemical properties	
Appearance	Cylindar grains, flakes
Odour	Odourless
Odour threshold	
pH	
Melting point/freezing point	
Initial boiling point and boiling range	
Flash point	
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability or explosive limits	No. During heating for a longer periods decomposition can occur.
Vapour pressure	
Vapour density	
Relative density	350-1000 g / cm ³
Solubility(ies)	Soluble in ketones and esters.
Partition coefficient: n-octanol/water	
Auto-ignition temperature	>175 °C
Decomposition temperature	
Viscosity	
Explosive properties	Yes
Oxidising properties	No

9.2 Other information	
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Trade name / Substance name: HIGH ENERGY-POWDER

SECTION 10: STABILITY AND REACTIVITY**10.1 Reactivity**

This product is not reactive

10.2 Chemical stability

This product is chemically stable

10.3 Possibility of hazardous reactions**10.4 Conditions to avoid**

Shock, friction, fire, heating or electrostatic charges

10.5 Incompatible materials

Strong oxidizers and strong bases

10.3 Hazardous decomposition products

Nitrous gases formed during heating and fire.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

Information is missing

Skin corrosion/irritation

-

Serious eye damage/irritation

Dust may cause eye irritation

Respiratory or skin sensitisation

-

Germ cell mutagenicity

-

Carcinogenicity

-

Reproductive toxicity

-

STOT-single exposure

-

STOT-repeated exposure

-

Aspiration hazard

-

Other information

-

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity**

Information is missing

12.2 Persistence and degradability

Trade name / Substance name: HIGH ENERGY-POWDER

Information is missing

12.3	Bioaccumulative potential
	Information is missing
12.4	Mobility in soil
	Information is missing
12.5	Results of PBT and vPvB assessment
	Information is missing
12.6	Other adverse effects
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SECTION 13: DISPOSAL CONSIDERATIONS

13.1	Waste treatment methods
	Packaging should be handled as dangerous goods. Waste and contaminated packaging should be disposed as waste explosives. When heated, there is risk of explosion. Disposal must be carried out at an intended place and by trained personnel.

SECTION 14: TRANSPORT INFORMATION

14.1	UN number
	0161
14.2	UN proper shipping name
	Powder, smokeless
14.3	Transport hazard class(es)
	1.3C
14.4	Packing group
	II
14.5	Environmental hazards
	-
14.6	Special precautions for user
	-
14.7	Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
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SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture
	European Council Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. EU Regulation (EC) No 1907/2006 REACH.
15.2	Chemical safety assessment

SECTION 16: OTHER INFORMATION

Indication of changes

Abbreviations and acronyms

Key literature references and sources for data

Trade name / Substance name: HIGH ENERGY-POWDER

Used method in evaluating classification

List of relevant R-and S-phrases or/and safety and precautionary statements

- R1 Explosive when dry.
 - R3 Extreme risk of explosion by shock, friction, fire or other sources of ignition.
 - R22 Harmful if swallowed.
 - R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.
 - R33 Danger of cumulative effects.
 - R50 Very toxic to aquatic organisms.
 - R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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- S1/2 Keep locked-up and out of reach of children.
 - S35 This material and its container must be disposed of in a safe way.
 - S36/37 Wear suitable protective clothing and gloves.
 - S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

- H200 Unstable explosive
- H203 Explosive substances, mixtures and articles, Division 1.3. Expl. 1.3
- H228 Flammable solid
- H300 Fatal if swallowed
- H310 Fatal in contact with skin
- H330 Fatal if inhaled
- H335 May cause respiratory irritation
- H373 May cause damage to organs through prolonged or repeated exposure
- H400 Very toxic to aquatic life
- H411 Toxic to aquatic life with long lasting effects

Training advice for workers