# VihtaVuori

#### VihtaVuori N100 & N300 Series

## **SAFETY DATA SHEET**

March 2015

The following **N100, N300, 2N and 3N** series powders are manufactured by VihtaVuori <sup>®</sup> and distributed by Hodgdon Powder Company.

20N29 3N37 3N38 N105 N110 N133 N135 N140 N150 N160 N165 N310 N320

> N32C N340 N350

Trade name / Substance name: N-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

N-POWDER

Company product code

N100-, N300-, N400-, 2N-, 3N-series, N32C, 20N29, 24N41, JK6-powders

B7T-, and B19T-large caliber 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.

Trade name / Substance name: N-POWDER

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	REACH	Concentration	Classification
	index number	Registration No.		
Nitrosellulose (>12.6%)	603-037-00-6		< 99 %	Expl. 1.1, H201
Diphenylamine	612-026-00-5		< 2 %	Acute Tox. 3, H301+H311+H331; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410;
Diethyldiphenylurea (Centralite I)	85-98-3		< 3 %	Acute Tox. 4, H302; Aquatic Chronic 3, H412

#### **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.

Trade name / Substance name: N-POWDER

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 quideline value of dust 10 mg/m3 can be used.

Other limit values

**DNEL** 

**PNEC** 

#### 8.2 Exposure controls

Appropriate engineering controls

Trade name / Substance name: N-POWDER

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 paricle filter P3

## Thermal hazards

## **Environmental exposure controls**

SECTION	SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES		
9.1	Information on cphysical and chemical properties		
	Appearance	Cylindar grains, flakes	
	Odour	Odourless	
	Odour threshold		
	рН		
	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 / cm3	
	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: N-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

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## 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: N-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

#### **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
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

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: N-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.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R33 Danger of cumulative effects.

R50 Very toxic to aquatic organisms.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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)

H203 Explosive substances, mixtures and articles, Division 1.3. Expl. 1.3

H228 Flammable solid

H301 Toxic if swallowed

H311 Toxic in contact with skin

H335 May cause respiratory irritation

H400 Very toxic to aquatic life

**Training advice for workers**