

VihtaVuori

VihtaVuori N100 & N300 Series

SAFETY DATA SHEET

June 2017

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

20N29 **(EX-2015050312)**

3N37 **(EX-2015050313)**

3N38 **(EX-2015050313)**

N105 **(EX-2015050312)**

N110 **(EX-2015050312)**

N120 **(EX-2015050312)**

N130 **(EX-2015050312)**

N133 **(EX-2015050312)**

N135 **(EX-2015050312)**

N140 **(EX-2015050312)**

N150 **(EX-2015050312)**

N160 **(EX-2015050312)**

N165 **(EX-2015050312)**

N310 **(EX-2015050313)**

N320 **(EX-2015050313)**

N32C **(EX-2015050313)**

N340 **(EX-2015050313)**

N350 **(EX-2015050313)**

1.4C EX Approvals in bold parenthesis
ONLY APPROVED for 1 lb. container as a 1.4C

Date:18.2.2014

Former date:

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 index number | REACH Registration No. | Concentration | Classification |
|------------------------------------|---------------------------|------------------------|---------------|---|
| 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 guideline 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 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 | |
|-----------------------|--|
|-----------------------|--|

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 - |
| | 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 |
| | 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 |
| | - |

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