



PREDUZEĆE

- MILAN BLAGOJEVIĆ - NAMENSKA -

32240 Lučani, YU, Radnička b.b.

Product Safety Data Sheet

Revision September 2003

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

PRODUCT: Nitrocellulose with water, 25% or more water, by weight (UN2555)
USE Nitrocellulose is used as raw material in the manufacture of dynamite
MANUFACTURER: Preduzeće "Milan Blagojević – Namenska"
ADDRESS: Radnička bb
32240 Lučani
Serbia & Montenegro
Telephone: +381 32 817-539; 818-321;
Fax: +381 32 818-058; 817-814;
Emergency Telephone Number (24Hour): + 381 32 817 772

2. COMPOSITION/INFORMATION ON INGREDIENTS

	%	CAS No	EC Number	Index No
Nitrocellulose(cellulose nitrate) (<12.3 % N)	64-66	9004-70-0	Not applicable	603-037-01-3
or Water	34-36	7732-18-5	Not applicable	-

	Hazard Symbol	R Phases
Nitrocellulose (cellulose nitrate) (<12.3 % N)	F	R11 Highly flammable

3. HAZARDS IDENTIFICATION

Nitrocellulose can be ignited by flame, heat, shock, impact, friction, sparks or static electricity. Burning nitrocellulose will produce toxic fumes.

4. FIRST-AID MEASURES

Inhalation of Vapour & Materials of Combustion: Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Call a physician.

Skin Contact: Immediately flush skin with plenty of water.
Remove contaminated clothing.
Call a physician if irritation persists.
Wash clothing before reuse.

Eye Contact: Immediately flush eyes with an eye-wash-solution or plenty of water, holding the eyelids apart, for at least 10 minutes.
Call a physician.

Ingestions: Do not induce vomiting.
Give large quantities of water.

Never give anything by mouth to an unconscious person.
Get medical attention immediately.

5. FIRE-FIGHTING MEASURES

Burning nitrocellulose can **only** be extinguished by **large** quantities of water applied as mist or spray.

Drum lids can be blown off.

Fumes emitted from burning nitrocellulose may contain toxic nitrous gases.

Fire-fighters must work from the windward side and should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

After the fire is extinguished material may be unstable and could re-ignite by itself. Therefore ensure residual material is thoroughly wetted.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGES)

Only water.

Remove sources of ignition. No smoking!

Ensure sufficient ventilation or fresh air.

Avoid contact with eyes or skin.

Avoid inhalation of vapours.

Wear suitable protective equipment/clothing. Check with the PPE manufacturer.

Tools used with nitrocellulose should be non-ferrous materials such as copper or brass or wood i.e. non-sparking.

Spilled nitrocellulose must be thoroughly wetted with plenty of water, swept up carefully and kept in tightly closed watertight container.

Prevent spilled nitrocellulose from contaminating water courses, sewers, soil or vegetation.

7. HANDLING & STORAGE

Handling

Do not drop, slide, roll or bang the drums.

Keep away from flame, heat, shock, impact, friction, sparks or static electricity.

Do not allow wetted nitrocellulose to dry out.

Ensure adequate ventilation.

Pull polyethylene liner, if present, carefully down over the outside of the container. Ensure package is completely grounded / earthed during emptying.

Tools used with nitrocellulose should be of non-ferrous materials such as copper, brass or wood.

Tools made of plastic material must not be used because of their tendency to produce static electricity.

Avoid contact with strong alkaline and acidic materials, amines or oxidant agents.

Keep quantity of product in the processing area to a minimum. This would not be expected to exceed the amount necessary for one shift.

Storage

Store in a cool and well ventilated place appropriate to the packaging material. Keep in original containers. Maximum recommended continuous storage temperature is 40° C.

Keep away from heat including direct sunlight, flame or any source of ignition.

Pallet loads should be stacked no more than **two** high.

Nitrocellulose is not to be stored together with incompatible materials for instance strong alkaline and acidic materials, amines or oxidant agents.

Rotate inventory on a "First in/first out" basis.

The recommended shelf life of two years from month of manufacture, for unopened packages, should not be exceeded.

Once a package has been opened, the entire contents should be used as quickly as possible.

Do not open or empty containers within the storage area.

The storage should be in accordance with national state and local environmental regulations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employee Protection Recommendations:

Respiratory protection: - Where suitable engineering controls are not fitted or are inadequate wear suitable respiration equipment e.g. an approved organic vapour respirator.

Hand protection: - Wear solvent resistant gloves.

Eye protection: - Not applicable.

Skin protection: - Non-flammable, antistatic protective clothing antistatic protective shoes.

It should be noted that glove performance can vary widely and it is recommended that appropriate advice on the selection of gloves and other PPE is obtained from the PPE manufacturer.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	flakes
Colour:	white
Odour:	Without odour
Bulk density:	500-600 Kg/m ³
Specific Gravity	1.66
Viscosity:	not applicable
Solubility in water:	NC is soluble in esters, ketones and glycol ethers.
Decomposition temperature:	higher than 180°C

10. STABILITY AND REACTIVITY

Stability:	Stable under recommended storage and handling conditions.
Conditions to Avoid:	Avoid exposure to heat, shock and friction. Stability decreases and deterioration starts with increasing temperatures. Observe recommended storage conditions.
Materials to Avoid:	Nitrocellulose decomposes when in contact with strong alkaline and acidic materials, amines or oxidising agents.
Hazardous Decomposition Products	CO, CO ₂ , oxides of nitrogen and other potentially toxic fumes.

11. TOXICITY DATA

Nitrocellulose has been in use for many years with no evidence of adverse effects.

Oral LD50, Rat	> 5000 mg/kg
Inhalation LD50, Rat	-
Dermal Rabbit	-
Eye Contact	Not Irritating
Skin Contact	Not Irritating

12. ECOLOGY DATA

There is no evidence to suggest that nitrocellulose with water has any detrimental effect on the environment

1.	Fish toxicity LC50 96 hr (Fathead minnow)	>10,000 mg/l
2.	Bacteria toxicity EC50	>1000 mg/l
3.	Chemical oxygen demand (COD)	-
4.	Biochemical oxygen demand (BOD ₅)	-
5.	Degradability	Resistant to degradation
6.	Water pollution class (WGK)	Not Hazardous
7.	Bioaccumulation	Nil
8.	Log (Pow)	-

13. DISPOSAL CONSIDERATIONS

Product disposal

Alternatively destroy by burning small quantities outside at a safe place in an open fire under competent control. Ignite remotely.

Waste disposal should be in accordance with national, state and local environmental regulations.

Container disposal

Empty container retains hazardous residue. Observe all label precautions. Keep away from heat, sparks and flames. Do not weld or use cutting torch on or near container.

Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product.

Remove all hazardous residue from container eg. Wiping with damp rag: cleaning should include inside of lid and closure ring. (Dispose of rag as for spilled nitrocellulose).

Remove or erase all labels. Then offer container for recycling/reconditioning or puncture or otherwise destroy empty container and dispose of in facility permitted for non hazardous waste.

14. TRANSPORTATION

Proper Shipping Name	UN No	Packing Groups	Hazard Class
Nitrocellulose with water, 25% or more water, by weight	2555	II	4.1

ADR / RID

Proper Shipping Name	Substance Identification No	Hazards Class	Packing Group	Classification Code
Nitrocellulose with water, 25% or more water, by weight	2555	4.1	II	D

IATA/IMDG

Proper Shipping Name	UN No	Packing Groups	Hazard Class	Marine Pollutant
Nitrocellulose with water, 25% or more water, by weight	2555	II	4.1	No

15. REGULATORY INFORMATION

WATER WET

EEC Classification: Flammable

Hazard Symbol: F

Risk Phrases: R11 Highly Flammable

Safety Phrases: S7 Keep Container tightly closed
S16 Keep Away from Sources of Ignition - No Smoking.
S33 Take Precautionary Measures Against Static Discharge.

16. OTHER INFORMATION

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

Information in this document is believed to be accurate and is given in good faith but it is for the customer to satisfy itself of the suitability for its own particular purpose. The information provided is intended to describe the product for the purposes of health, safety and environmental requirements only. It is not intended, and should not be construed as a warranty. Enterprises MILAN BLAGOJEVIC – NAMENSKA should be consulted for further information.