Nitrocellulose (cas 9004-70-0) MSDS

1 - Product and Company Information

Product Name CELLULOSE NITRATE, 12 WT. % N,
VISCOSITY 18-25 CPS (WITH 30% IPA) (NO
BULK SALES ALLOWED)
Product Number 435023
2 - Composition/Information on Ingredients

Product Name CAS # EC no Annex I
Index Number
CELLULOSE NITRATE 9004-70-0 None None

Ingredient Name Percent CAS # EC no Annex I
Index Number
2-PROPANOL 30 67-63-0 200-661-7 603-117-00-0
Symbols: F-Xi
R-Phrases: 11-36-67
Highly flammable. Irritating to eyes. Vapors may cause drowsiness
and dizziness.

CELLULOSE NITRATE 70 None None None

Formula C24H36N8O38
Synonyms C 2018 * CA 80-15 * Celex * Celloidin *
Cellulose nitrate * Cellulose, nitrate (9CI) *
Cellulose tetranitrate * Collodion * Collodion
cotton * Collodion wool * Colloxylin * Corial EM
finish F * E 1440 * Flexible collodion * FM-Nts
* Guncotton * HX 3/5 * Kodak LR 115 * LR 115 *
Nitrocellulose E950 * Nitrocotton * Nitron *
Nitron (nitrocellulose) * Nixon N/C * NTs 62 *
NTs 218 * NTs 222 * NTs 539 * NTs 542 *
Parlodion * Pyralin * Pyroxylin * RF 10 * RS *
R.S.Nitrocellulose * Soluble gun cotton * Synpor
* Tsapolak 964 * Xyloidin

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Highly flammable. Irritating to eyes and skin.
4 - First Aid Measures

AFTER INHALATION
If inhaled, remove to fresh air. If not breathing give
artificial respiration. If breathing is difficult, give oxygen.

AFTER SKIN CONTACT
In case of skin contact, flush with copious amounts of water for
at least 15 minutes. Remove contaminated clothing and shoes.
Call a physician.

AFTER EYE CONTACT
In case of contact with eyes, flush with copious amounts of
water for at least 15 minutes. Assure adequate flushing by
separating the eyelids with fingers. Call a physician.

AFTER INGESTION
If swallowed, wash out mouth with water provided person is

conscious. Call a physician.

5 - Fire Fighting Measures

EXPLOSION DATA
Dust Potential: This material, like most materials in powder form, is capable of creating a dust explosion.

EXTINGUISHING MEDIA
Suitable: Carbon dioxide, dry chemical powder, or appropriate foam.
Unsuitable: Do not use water.

SPECIAL RISKS
Specific Hazard(s): Flammable liquid. Emits toxic fumes under fire conditions. Dry material is an explosive.
Explosion Hazards: Vapor may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions. Dry material is an explosive.

SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

SPECIFIC METHOD(S) OF FIRE FIGHTING
Use water spray to cool fire-exposed containers.

6 - Accidental Release Measures

PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL
Evacuate area. Shut off all sources of ignition. Use nonsparking tools.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP
Immediately soak spilled material with water and remove to covered metal containers. Add water to containers. Do not allow material to become dry.

7 - Handling and Storage

HANDLING
Directions for Safe Handling: Do not get in eyes, on skin, on clothing. Do not breathe vapor.
Protection against Fire and Explosion: Dry material is an explosive.

STORAGE
Conditions of Storage: Keep container closed. Keep away from heat, sparks, and open flame.

SPECIAL REQUIREMENTS: Do not allow material to become dry.

8 - Exposure Controls / Personal Protection

ENGINEERING CONTROLS
Safety shower and eye bath. Use nonsparking tools. Mechanical exhaust required.

GENERAL HYGIENE MEASURES
Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.
Hand Protection: Rubber gloves.
Eye Protection: Chemical safety goggles.

9 - Physical and Chemical Properties

Appearance Physical State: Liquid
Color: Very faintly yellow
Form: Clear liquid

Property Value At Temperature or Pressure

pH N/A
BP/BP Range 83 ??C 760 mmHg
MP/MP Range N/A
Flash Point 12 ??C Method: closed cup
Flammability N/A
Autoignition Temp N/A
Oxidizing Properties N/A
Explosive Properties N/A
Explosion Limits N/A
Vapor Pressure N/A
SG/Density 1.23 g/cm3
Partition Coefficient N/A
Viscosity N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
Evaporation Rate N/A
Bulk Density N/A
Decomposition Temp. N/A
Solvent Content N/A
Water Content N/A
Surface Tension N/A
Conductivity N/A
Miscellaneous Data N/A
Solubility N/A

10 - Stability and Reactivity

STABILITY
Stable: Stable.
Materials to Avoid: Aluminum, Halogens, Acid anhydrides, Bases, Acids, Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS
Hazardous Decomposition Products: Hydrogen cyanide, Carboxylic acids, Aldehydes Carbon monoxide, Carbon dioxide, Nitrogen oxides Methane.

HAZARDOUS POLYMERIZATION
Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: QW0970000

ACUTE TOXICITY

LD50
Oral
Rat
> 5000 mg/kg

LD50
Oral
Mouse

> 5000 mg/kg

SIGNS AND SYMPTOMS OF EXPOSURE
Prolonged exposure can cause: Nausea, headache, and vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Narcotic effect.

ROUTE OF EXPOSURE
Skin Contact: Causes skin irritation.
Skin Absorption: May be harmful if absorbed through the skin.
Eye Contact: Causes eye irritation.
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion: May be harmful if swallowed.

TARGET ORGAN INFORMATION
Kidneys. Liver. Cardiovascular system. G.I. System. Nerves.

CHRONIC EXPOSURE - CARCINOGEN
Result: This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

12 - Ecological Information

No data available.

13 - Disposal Considerations

SUBSTANCE DISPOSAL
Contact a licensed professional waste disposal service to dispose of this material. Observe all federal, state, and local environmental regulations.

14 - Transport Information

RID/AD UN#: 2556
Class: 4.1
PG: II
Proper Shipping Name: Nitrocellulose with alcohol

IMDG
UN#: 2556
Class: 4.1
PG: II
Proper Shipping Name: CELLULOSE NITRATE WITH ALCOHOL
Marine Pollutant: No
Severe Marine Pollutant: No

IATA
UN#: 2556
Class: 4.1
PG: II
Proper Shipping Name: Nitrocellulose with alcohol
Inhalation Packing Group I: No

15 - Regulatory Information

CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES
INDICATION OF DANGER: F-Xi
Highly Flammable. Irritant.
R-PHRASES: 11-36/38
Highly flammable. Irritating to eyes and skin.
S-PHRASES: 16-26-36-48-

Keep away from sources of ignition - no smoking. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing. Keep wet with: 2-Propanol

16 - Other Information

WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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