

Material Safety Data Sheet

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Version 1.1

According to 91/155/EEC

1 - Product and Company Information

Product Name CELLULOSE NITRATE, 12 WT. % N,
 VISCOSITY 18-25 CPS (WITH 30% IPA)
 Product Number 435023
 Company Sigma-Aldrich Pte Ltd
 #08-01 Citilink Warehouse
 Singapore 118529
 Singapore
 Technical Phone # 65 271 1089
 Fax 65 271 1571

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
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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/cm ³	
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: Oxidizing agents, Acids, Bases, Acid anhydrides, Halogens, Aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS

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

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. Narcotic effect. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

Nerves. Kidneys. Liver. Cardiovascular system. G.I. System.

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/ADR

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. Copyright 2004 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.

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