

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****Nitrocellulose with ethanol / Category 4****Hacocell 30% - AH 22 – AH 35 / H 33 spez. - H 35 spez.****Hacocell 35% - AH 9 - AH 35 / H 12 – H 33 / H 17 spez.****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**

Industrial Nitrocellulose is used as a binder and or film former in the manufacture of coatings, cosmetics, inks, paints and personal care items.

**Uses advised against**

No data available.

**1.3 Details of the supplier of the safety data sheet****Address**HAGEDORN-NC GmbH  
Rheiner Landstraße 195 A  
49078 D-Osnabrück

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**Information provided by / telephone**

Labor Werk Lingen +49 (0) 591 9148-22; E-Mail: labor@hagedorn.de

**Advice on Safety Data Sheet**

sdb\_info@umco.de

**1.4 Emergency telephone number**

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Desen. Expl. 4; H208

Eye Irrit. 2; H319

**Classification information**

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

**2.2 Label elements****Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS02



GHS07

**Signal word**

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

Warning

**Hazard statement(s)**

H208 Fire hazard; increased risk of explosion if desensitising agent is reduced.  
 H319 Causes serious eye irritation.

**Precautionary statement(s)**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P212 Avoid heating under confinement or reduction of the desensitising agent.  
 P230 Keep wetted with ethanol.  
 P233 Keep container tightly closed.  
 P243 Take action to prevent static discharges.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P371+P380+P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.  
 P378 In case of fire: Use water to extinguish.

**2.3 Other hazards**

Heating Industrial NC under confinement may lead to an explosion. Therefore Industrial NC products must never be heated under confinement. Nitrocellulose can be ignited by flame, heat, shock, impact, friction, sparks or static electricity. In cases of fire and decomposition of nitrocellulose, toxic gases may be produced in some circumstances (See section 5).

Nitrocellulose decomposes in contact with strong acids and strong alkalis.

PBT assessment

No data available.

vPvB assessment

No data available.

**SECTION 3: Composition/information on ingredients****3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures****Chemical characterization**

Mixture of nitrocellulose with phlegmatizing agent

**Hazardous ingredients**

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	<b>cellulose nitrate (&lt;12.6% N)</b>			
	9004-70-0 - 603-037-00-6 -	Expl. 1.1; H201	>= 50.00 - < 70.00	wt%
2	<b>ethanol</b>		<b>pls. refer to footnote (1)</b>	
	64-17-5 200-578-6 603-002-00-5 01-2119457610-43	Flam. Liq. 2; H225 Eye Irrit. 2; H319	>= 25.00 - < 50.00	wt%
3	<b>propan-2-ol</b>			
	67-63-0 200-661-7 603-117-00-0 01-2119457558-25	Eye Irrit. 2; H319 Flam. Liq. 2; H225 STOT SE 3; H336	< 2.50	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

(1) Aberrant from/in addition to the classification set out in Annex VI, this substance is classified according to European Regulation (EC) No 1272/2008 (CLP), Article 4 (3), paragraph 2.

Trade name: Nitrocellulose with ethanol / Category 4

Current version : 4.1.0, issued: 06.04.2022

Replaced version: 4.0.0, issued: 08.10.2021

Region: GB

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	T	-	-	-

Full text for the notes: pls. see section 16 "Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)".

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

#### After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a doctor immediately.

#### After skin contact

Instantly wash with copious amounts of water.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Begin with medical treatment.

#### After ingestion

Rinse the mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Symptoms

Exposure to vapours or materials of combustion may give rise to headache, dizziness, drowsiness, nausea and delayed breathing difficulties. Eye pain redness, tearing, swelling of eyelids, itching. Prolonged skin contact may result in irritation.

### 4.3 Indication of any immediate medical attention and special treatment needed

If breathing is difficult or patient show signs of lack of consciousness, seek immediate medical assistance.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable extinguishing media

Sand, CO<sub>2</sub>, foam or dry powder will NOT extinguish burning nitrocellulose and must not be used.

### 5.2 Special hazards arising from the substance or mixture

Burning nitrocellulose may produce toxic fumes in some circumstances. The fumes may contain nitrous gases if there is insufficient oxygen for combustion.

After the fire is extinguished, material may be unstable, could reignite or produce toxic fumes. Therefore ensure that residual material is thoroughly wetted with water.

### 5.3 Advice for firefighters

Evacuate the area. Fight fire remotely due to the risk of an explosion.

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.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not inhale vapours. Keep away from ignition sources.

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB**For emergency responders**

Personal protective equipment (PPE) - see section 8.

**6.2 Environmental precautions**

Do not discharge into the drains/surface waters/groundwater.

**6.3 Methods and material for containment and cleaning up**

Spilled nitrocellulose must be thoroughly wetted with plenty of water, swept up carefully and kept in tightly closed watertight container, see section 13. Use tools that do not produce sparks, see section 7.

**6.4 Reference to other sections**

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling****Advice on safe 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, because nitrocellulose becomes more sensitive in the dry state. Keep wetted with ethanol.

If nitrocellulose has dried out, immediately re-damp with ethanol. Keep container tightly closed when not in use.

Ensure adequate ventilation. Pull polyethylene liner, carefully down over the outside of the package.

Ensure package is completely grounded/earthed during emptying.

Do not remove the liner from the package during emptying.

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

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

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

Do not allow nitrocellulose to enter drains or water courses.

**General protective and hygiene measures**

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale dust. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing.

**Advice on protection against fire and explosion**

Handle with caution - Avoid shock, impact and friction. Isolate from sources of heat, sparks and open flame. Take precautionary measures against static charges. Never allow nitrocellulose to dry out, because nitrocellulose can react sensitively when dry. Use explosion-proof equipment/fittings and non-sparking tools.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Protect from heat and direct sunlight. Keep away from sources of ignition.

**Recommended storage temperature**

Value &lt; 40 °C

**Storage stability**

Comments Nitrocellulose should be used within two years of the date of manufacture. This applies to nitrocellulose stored in original, unopened packages.

**Requirements for storage rooms and vessels**

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

**Incompatible products**

Substances to be avoided, see section 10. Do not store with combustible materials.

**7.3 Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection**

Trade name: Nitrocellulose with ethanol / Category 4

Current version : 4.1.0, issued: 06.04.2022

Replaced version: 4.0.0, issued: 08.10.2021

Region: GB

## 8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Ethanol			
	WEL long-term (8-hr TWA reference period)	1920	mg/m <sup>3</sup> 1000 ppm
2	propan-2-ol	67-63-0	200-661-7
<b>List of approved workplace exposure limits (WELs) / EH40</b>			
Propan-2-ol			
	WEL short-term (15 min reference period)	1250	mg/m <sup>3</sup> 500 ppm
	WEL long-term (8-hr TWA reference period)	999	mg/m <sup>3</sup> 400 ppm

DNEL, DMEL and PNEC valuesDNEL values (worker)

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	ethanol	64-17-5 200-578-6		
	dermal	Long term (chronic)	systemic	343 mg/kg/day
	inhalative	Long term (chronic)	systemic	950 mg/m <sup>3</sup>
2	propan-2-ol	67-63-0 200-661-7		
	dermal	Long term (chronic)	systemic	888 mg/kg/day
	inhalative	Long term (chronic)	systemic	500 mg/m <sup>3</sup>

DNEL value (consumer)

No	Substance name	CAS / EC no		
	Route of exposure	Exposure time	Effect	Value
1	ethanol	64-17-5 200-578-6		
	oral	Long term (chronic)	systemic	87 mg/kg/day
	dermal	Long term (chronic)	systemic	206 mg/kg/day
	inhalative	Long term (chronic)	systemic	114 mg/m <sup>3</sup>
2	propan-2-ol	67-63-0 200-661-7		
	oral	Long term (chronic)	systemic	26 mg/kg/day
	dermal	Long term (chronic)	systemic	319 mg/kg/day
	inhalative	Long term (chronic)	systemic	89 mg/m <sup>3</sup>

PNEC values

No	Substance name	CAS / EC no	
	ecological compartment	Type	Value
1	ethanol		64-17-5 200-578-6
	water	fresh water	0.96 mg/L
	water	marine water	0.79 mg/L
	water	fresh water sediment	3.6 mg/kg dry weight
	water	marine water sediment	2.9 mg/kg dry weight
	soil	-	0.63 mg/kg
	sewage treatment plant	-	580 mg/L
	secondary poisoning	-	0.38 mg/kg food
2	propan-2-ol	67-63-0 200-661-7	
	water	fresh water	140.9 mg/L
	water	Aqua intermittent	140.9 mg/L

**Trade name:** Nitrocellulose with ethanol / Category 4

**Current version :** 4.1.0, issued: 06.04.2022

**Replaced version:** 4.0.0, issued: 08.10.2021

**Region:** GB

water	marine water	140.9	mg/L
water	fresh water sediment	552	mg/L
water	marine water sediment	552	mg/L
soil	-	28	mg/kg
sewage treatment plant	-	2251	mg/L
secondary poisoning with reference to: food	-	160	mg/kg

## 8.2 Exposure controls

### Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn. Concentration of solvent in the workplace atmosphere should be monitored. Use effective local exhaust to keep the concentration of damping agents below the exposure limits.

Monitoring Methods:

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours.

### Personal protective equipment

#### Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust formation, take appropriate measures for breathing protection in the event that workplace threshold values are not specified.

#### Eye / face protection

Safety glasses with side protection shield (EN 166); Face shield

#### Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves. anti-static gloves

Appropriate Material	butyl rubber		
Material thickness	>	0.5	mm
Breakthrough time	>	8	h

#### Other

Fire-resistant antistatic protective clothing. Antistatic shoes

### Environmental exposure controls

The material should be used in closed equipment. Keep container tightly closed when not in use.

Do not allow to enter drains or water courses.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>State of aggregation</b>	
solid	
<b>Form/Colour</b>	
Fibre; granules / flakes	
white	
<b>Odour</b>	
according to moistening agent	
<b>pH value</b>	
Comments	Test not possible due to the kind of product.
<b>Boiling point / boiling range</b>	
Value	79 - 80 °C

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

Reference substance	Ethanol		
<b>Melting point/freezing point</b>			
No data available			
<b>Decomposition temperature</b>			
Value	> 180 °C		
Comments	Deflagration temperature of NC wool		
<b>Flash point</b>			
Value	12 °C		
Method	Abel-Pensky		
Reference substance	Ethanol		
<b>Ignition temperature</b>			
No data available			
<b>Auto-ignition temperature</b>			
Value	> 180 °C		
<b>Explosive properties</b>			
Risk of explosion if heated under confinement.			
<b>Flammability</b>			
highly flammable			
<b>Lower explosion limit</b>			
Value	3.5 % vol		
Reference substance	Ethanol		
<b>Upper explosion limit</b>			
Value	15.0 % vol		
Reference substance	Ethanol		
<b>Vapour pressure</b>			
Value	58.1 mbar		
Reference temperature	20 °C		
Reference substance	Ethanol		
<b>Relative vapour density</b>			
Value	1.6		
Reference substance	Ethanol		
<b>Evaporation rate</b>			
Value	8.3		
Reference substance	Ethanol		
<b>Relative density</b>			
No data available			
<b>Density</b>			
Value	> 1 kg/dm <sup>3</sup>		
<b>Bulk density</b>			
Value	250 - 600 kg/m <sup>3</sup>		
<b>Solubility in water</b>			
Comments	insoluble		
<b>Solubility</b>			
No data available			
<b>Soluble in</b>			
esters; Ketones; glycol ether			
<b>Partition coefficient n-octanol/water (log value)</b>			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

log Pow	<	0	
<b>2</b>   <b>ethanol</b>		<b>64-17-5</b>	<b>200-578-6</b>
log Pow		-0.35	
Reference temperature		24	°C
Method	OECD 107		
Source	ECHA		
<b>3</b>   <b>propan-2-ol</b>		<b>67-63-0</b>	<b>200-661-7</b>
log Pow		0.05	
Reference temperature		25	°C
Source	ECHA		

**Viscosity**

No data available

**Particle characteristics****9.2 Other information****Other information**

Desensitising Agent	Ethanol
Exothermic Decomposition Energy	2930 – 3841 kJ/kg

Corrected Burning rate Ac.:

These industrial nitrocellulose products have a corrected burning rate (Ac) less than 60 kg/min, determined by the test method described in subsection 51.4 of the UN Recommendations.

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Industrial nitrocellulose products show a limiting diameter of >2 mm in the test series 2(b) Koenen Test of the UN Manual of Tests and Criteria. This test result shows that industrial nitrocellulose products are sensitive to heating under confinement. Heating Industrial nitrocellulose under confinement may lead to an explosion. Therefore industrial nitrocellulose products must never be heated under confinement.

If allowed to dry out, industrial nitrocellulose becomes significantly more sensitive to heat, friction and static electricity. The burning rate of dry nitrocellulose is approximately 50 times that of 30% solvent damped material.

**10.2 Chemical stability**

Stable under recommended storage and handling conditions (See section 7).

**10.3 Possibility of hazardous reactions**

Exothermic reactions are possible in the event of contact with incompatible substances.

**10.4 Conditions to avoid**

Heat, naked flames or other ignition sources, electrostatic charge and discharge, formation of vapours/aerosols. Prevent evaporation of the moistening agent.

**10.5 Incompatible materials**

Alkalis; corrosive substances; Amines; Oxidizing agents

**10.6 Hazardous decomposition products**

In case of fire: see section 5.

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

<b>Acute oral toxicity</b>			
No	Substance name	CAS no.	EC no.
<b>1</b>	<b>cellulose nitrate (&lt;12.6% N)</b>	<b>9004-70-0</b>	<b>-</b>
LD50		>	5000 mg/kg bodyweight
Species		rat	
<b>2</b>	<b>ethanol</b>	<b>64-17-5</b>	<b>200-578-6</b>
LD50		10470	mg/kg bodyweight
Species		rat	



Trade name: Nitrocellulose with ethanol / Category 4

Current version : 4.1.0, issued: 06.04.2022

Replaced version: 4.0.0, issued: 08.10.2021

Region: GB

Method	OECD 401
Source	ECHA
<b>3</b>	<b>propan-2-ol</b> <b>67-63-0</b> <b>200-661-7</b>
LD50	5840 mg/kg bodyweight
Species	rat
Method	OECD 401
Source	ECHA
Evaluation/classification	Based on available data, the classification criteria are not met.

**Acute dermal toxicity**

No data available

**Acute inhalational toxicity**

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>ethanol</b>	<b>64-17-5</b>	<b>200-578-6</b>
LC50		124.7	mg/l
Duration of exposure		4	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
<b>2</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
LC50	>	10000	ppmV
Duration of exposure		6	h
State of aggregation	Vapour		
Species	rat		
Method	OECD 403		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

**Skin corrosion/irritation**

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>cellulose nitrate (&lt;12.6% N)</b>	<b>9004-70-0</b>	<b>-</b>
Duration of exposure		4	h
Species	rabbit		
Method	OECD 404		
Evaluation	non-irritant		
<b>2</b>	<b>ethanol</b>	<b>64-17-5</b>	<b>200-578-6</b>
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation	non-irritant		
<b>3</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Species	rabbit		
Source	ECHA		
Evaluation	non-irritant		
Evaluation/classification	Based on available data, the classification criteria are not met.		

**Serious eye damage/irritation**

No	Substance name	CAS no.	EC no.
<b>1</b>	<b>cellulose nitrate (&lt;12.6% N)</b>	<b>9004-70-0</b>	<b>-</b>
Duration of exposure		24	h
Species	rabbit		
Method	OECD 405		
Evaluation	non-irritant		
<b>2</b>	<b>ethanol</b>	<b>64-17-5</b>	<b>200-578-6</b>
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	irritant		
<b>3</b>	<b>propan-2-ol</b>	<b>67-63-0</b>	<b>200-661-7</b>
Species	rabbit		
Method	OECD 405		

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

Source	ECHA
Evaluation	irritant
Evaluation/classification	Based on available data, the classification criteria are met.

Respiratory or skin sensitisation			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Route of exposure		Skin	
Species		guinea pig	
Method		OECD 406	
Source		ECHA	
Evaluation		non-sensitizing	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Germ cell mutagenicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Method		OECD 471	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	
2	propan-2-ol	67-63-0	200-661-7
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Reproduction toxicity			
No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
Method		OECD 416	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Carcinogenicity			
No data available			

STOT - single exposure			
No data available			

STOT - repeated exposure			
No	Substance name	CAS no.	EC no.
1	propan-2-ol	67-63-0	200-661-7
Route of exposure		inhalational	
Source		ECHA	
Evaluation/classification		Based on available data, the classification criteria are not met.	

Aspiration hazard			
No data available			

**11.2 Information on other hazards****Endocrine disrupting properties**

No data available.

**Other information**

No data available.

**SECTION 12: Ecological information****12.1 Toxicity**

Toxicity to fish (acute)			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
LC50		>	5000 mg/l
Duration of exposure		96	h
Species		Brachydanio rerio	
Method		OECD 203	

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

2	ethanol	64-17-5	200-578-6
LC50		15300	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	US EPA E03-05		
Source	ECHA		
3	propan-2-ol	67-63-0	200-661-7
LC50		9640	mg/l
Duration of exposure		96	h
Species	Pimephales promelas		
Method	OECD 203		
Source	ECHA		

**Toxicity to fish (chronic)**

No	Substance name	CAS no.	EC no.
1	ethanol	64-17-5	200-578-6
NOEC		250	mg/l
Duration of exposure		120	h
Species	Danio rerio		
Method	OECD 212		
Source	ECHA		

**Toxicity to Daphnia (acute)**

No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
EC50	>	10000	mg/l
Duration of exposure		48	h
Species	Daphnia magna		
Source	OECD 202		
2	ethanol	64-17-5	200-578-6
EC50		5012	mg/l
Duration of exposure		48	h
Species	Ceriodaphnia dubia		
Method	ASTM Standard E 729-80		
Source	ECHA		
3	propan-2-ol	67-63-0	200-661-7
EC50	>	10000	mg/l
Duration of exposure		24	h
Species	Daphnia magna		
Method	OECD 202		
Source	ECHA		

**Toxicity to Daphnia (chronic)**

No data available

**Toxicity to algae (acute)**

No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
EC50	>	10000	mg/l
Duration of exposure		78	h
Species	Algae		
Method	OECD 201		
2	ethanol	64-17-5	200-578-6
ErC50		275	mg/l
Duration of exposure		72	h
Species	Chlorella vulgaris		
Method	OECD 201		
Source	ECHA		

**Toxicity to algae (chronic)**

No data available

**Bacteria toxicity**

No	Substance name	CAS no.	EC no.
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**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB

1	cellulose nitrate (<12.6% N)	9004-70-0	-
EC50	>	10000	mg/l
Species	bacteriae		
Method	OECD 209		

**12.2 Persistence and degradability**

Biodegradability			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
Value	appr.	20	%
Duration		28	day(s)
Method	OECD 301 B		
Type	COD		
Value		460	mg/L
Method	DIN 38409 T.41		
Type	BOD		
Value		0	mgO2/l
with reference to	20 mg/l		
Method	DIN 38409 H51		
2	ethanol	64-17-5	200-578-6
Value		96	%
Duration		20	day(s)
Source	ECHA		
Evaluation	readily biodegradable		
3	propan-2-ol	67-63-0	200-661-7
Type	BOD/COD		
Value		53	%
Duration		5	day(s)
Source	ECHA		
Evaluation	readily biodegradable		

**12.3 Bioaccumulative potential**

Bioconcentration factor (BCF)			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
Evaluation/classification	no evidence for bioakkumulation		
Partition coefficient n-octanol/water (log value)			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
log Pow	<	0	
2	ethanol	64-17-5	200-578-6
log Pow		-0.35	
Reference temperature		24	°C
Method	OECD 107		
Source	ECHA		
3	propan-2-ol	67-63-0	200-661-7
log Pow		0.05	
Reference temperature		25	°C
Source	ECHA		

**12.4 Mobility in soil**

Mobility in soil			
No	Substance name	CAS no.	EC no.
1	cellulose nitrate (<12.6% N)	9004-70-0	-
Evaluation/classification	Nitrocellulose is insoluble in water and will not be mobile in soil.		

**12.5 Results of PBT and vPvB assessment**

Results of PBT and vPvB assessment	
PBT assessment	No data available.
vPvB assessment	No data available.

**Trade name:** Nitrocellulose with ethanol / Category 4**Current version :** 4.1.0, issued: 06.04.2022**Replaced version:** 4.0.0, issued: 08.10.2021**Region:** GB**12.6 Endocrine disrupting properties**

No data available.

**12.7 Other adverse effects**

No data available.

**12.8 Other information****Other information**

Do not discharge product unmonitored into the environment.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****Product**

It is recommended that small quantities of nitrocellulose should be dissolved prior to destruction as waste NC-lacquer. European Waste Catalogue (EWC) 08 01 11.

Waste disposal should be in accordance with national, state and local environmental regulations. Sewage disposal shall be discouraged. Do not allow into drains or water courses.

**Packaging**

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

With the earth/ground clip still in place, fold the liner into the empty package. Remove the earth clip and replace the lid of the drum or close the box.

Transfer the package to a non-hazardous area and remove the bag for disposal. The bag will contain a residue of nitrocellulose and must be disposed of as hazardous waste. Ensure that the residual nitrocellulose in the bag does not dry out before disposal.

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

**SECTION 14: Transport information****14.1 Transport ADR/RID/ADN**

Class	4.1
Classification code	D
Packing group	II
UN number	UN2556
Proper shipping name	NITROCELLULOSE WITH ALCOHOL
Tunnel restriction code	B
Label	4.1

**14.2 Transport IMDG**

Class	4.1
Packing group	II
UN number	UN2556
Proper shipping name	NITROCELLULOSE WITH ALCOHOL
EmS	F-B, S-J
Label	4.1

**14.3 Transport ICAO-TI / IATA**

Class	4.1
Packing group	II
UN number	UN2556
Proper shipping name	Nitrocellulose with alcohol
Label	4.1

**14.4 Other information**

No data available.

**14.5 Environmental hazards**

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

**14.6 Special precautions for user**

No data available.

# EU safety data sheet

**Trade name:** Nitrocellulose with ethanol / Category 4

**Current version :** 4.1.0, issued: 06.04.2022

**Replaced version:** 4.0.0, issued: 08.10.2021

**Region:** GB

## 14.7 Maritime transport in bulk according to IMO instruments

Not relevant

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulations

##### **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

##### **REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

##### **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES**

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	propan-2-ol	67-63-0	200-661-7	75

##### **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is not subject to Part 1 or 2 of Annex I.

##### **Other regulations**

Adhere to the national sanitary and occupational safety regulations when using this product.

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

## SECTION 16: Other information

#### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

#### **Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)**

H201	Explosive; mass explosion hazard.
H225	Highly flammable liquid and vapour.
H336	May cause drowsiness or dizziness.

#### **Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)**

T	This substance may be marketed in a form which does not have the physical hazards as indicated by the classification in the entry in Part 3. If the results of the relevant method or methods in accordance with Part 2 of Annex I of this Regulation show that the specific form of substance marketed does not exhibit this physical property or these physical hazards, the substance shall be classified in accordance with the result or results of this test or these tests. Relevant information, including reference to the relevant test method(s) shall be included in the safety data sheet.
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#### **Creation of the safety data sheet**

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# EU safety data sheet

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**Trade name:** Nitrocellulose with ethanol / Category 4

**Current version :** 4.1.0, issued: 06.04.2022

**Replaced version:** 4.0.0, issued: 08.10.2021

**Region:** GB

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This information is based on our present knowledge and experience.  
The safety data sheet describes products with a view to safety requirements.  
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

**Alterations/supplements:**

Alterations to the previous edition are marked in the left-hand margin.

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