SAFETY DATA SHEET
CELLULOSE THINNERS STANDARD

This Safety Data Sheet is prepared in accordance with Annex II to Regulation (EC) No 1907/2006 as amended by Regulations (EU) No. 453/2010 and (EU) 2015/830

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name CELLULOSE THINNERS STANDARD

Product number STDTHINXX

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses A volatile, liquid, solvent-based product for industrial and professional use to thin appropriate paints to ease application.

Uses advised against FOR PROFESSIONAL USE ONLY. Not for sale to or use by the general public

1.3. Details of the supplier of the safety data sheet

Supplier

Manor Coating Systems Ltd
Otley Road
Shipley
West Yorkshire
BD17 7DP

Tel: 01274 587351
Fax: 01274531360
chiefchemist@manorcoatingsystems.co.uk

Contact person Chief Chemist

1.4. Emergency telephone number

Emergency telephone Manor Coating Systems Ltd. 01274 587351 may be contacted (Office hours only)

National emergency telephone number

Members of the public should contact:
In England and Wales: NHS Direct 0845 4647 or 111
In Scotland: NHS24 08454 24 24 24
In Republic of Ireland: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC/1272/2008)

Physical hazards Flam. Liq. 2 - H225

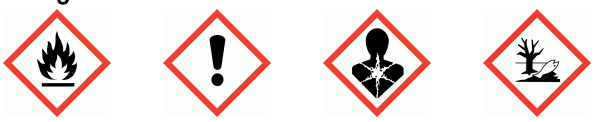
Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Repr. 2 - H361d STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

CELLULOSE THINNERS STANDARD

Pictogram



Signal word	Danger
Hazard statements	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H373 May cause damage to organs through prolonged or repeated exposure. H411 Toxic to aquatic life with long lasting effects.
Precautionary statements	P201 Obtain special instructions before use. P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P260 Do not breathe vapour/ spray. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P314 Get medical advice/ attention if you feel unwell. P403+P233 Store in a well-ventilated place. Keep container tightly closed.
Supplemental label information	RCH002a Restricted to professional users.
Contains	TOLUENE, ETHYL ACETATE, ACETONE, XYLENE, HEXANE-norm
Supplementary precautionary statements	P202 Do not handle until all safety precautions have been read and understood. P240 Ground/ bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P273 Avoid release to the environment. P302+P352 IF ON SKIN: Wash with plenty of water. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P308+P313 IF exposed or concerned: Get medical advice/ attention. P312 Call a POISON CENTER/ doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/ attention. P337+P313 If eye irritation persists: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish. P391 Collect spillage. P403+P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.
Labelling notes	For full text of Hazard- and EU Hazard-statements: see SECTION 16.

2.3. Other hazards

CELLULOSE THINNERS STANDARD

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

TOLUENE **10-30%**

CAS number: 108-88-3 EC number: 203-625-9 REACH registration number: 01-2119471310-51-0000

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Repr. 2 - H361d
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304

ETHYL ACETATE **10-30%**

CAS number: 141-78-6 EC number: 205-500-4 REACH registration number: 01-2119475103-46-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

ACETONE **10-30%**

CAS number: 67-64-1 EC number: 200-662-2 REACH registration number: 01-2119471330-49-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

XYLENE **10-30%**

CAS number: 1330-20-7 EC number: 215-535-7 REACH registration number: 01-2119488216-32-0000

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H312
Acute Tox. 4 - H332
Skin Irrit. 2 - H315
Eye Irrit. 2 - H319
STOT SE 3 - H335
STOT RE 2 - H373
Asp. Tox. 1 - H304

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METHYL ACETATE **5-10%**

CAS number: 79-20-9 EC number: 201-185-2 REACH registration number: 01-2119459211-47-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

PROPAN-2-OL **5-10%**

CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

ETHANOL **1-5%**

CAS number: 64-17-5 EC number: 200-578-6 REACH registration number: 01-2119457610-43-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319

BUTANONE **1-5%**

CAS number: 78-93-3 EC number: 201-159-0 REACH registration number: 01-2119457290-43-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

BUTYL ACETATE -norm **1-5%**

CAS number: 123-86-4 EC number: 204-658-1 REACH registration number: 01-2119485493-29-0000

Classification
Flam. Liq. 3 - H226
STOT SE 3 - H336

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ISOPROPYL ACETATE **1-5%**

CAS number: 108-21-4 EC number: 203-561-1 REACH registration number: 01-2119537214-46-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC **1-5%**

CAS number: 64742-95-6 EC number: 265-199-0 REACH registration number: 01-2119486773-24-0000

Classification
Flam. Liq. 3 - H226
STOT SE 3 - H335, H336
Asp. Tox. 1 - H304
Aquatic Chronic 2 - H411

CYCLOHEXANE **1-5%**

CAS number: 110-82-7 EC number: 203-806-2 REACH registration number: 01-2119463273-41-0000

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
STOT SE 3 - H336
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

HEXANE-norm **1-5%**

CAS number: 110-54-3 EC number: 203-777-6 REACH registration number: 01-2119480412-44-0000

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
Repr. 2 - H361f
STOT SE 3 - H336
STOT RE 2 - H373
Asp. Tox. 1 - H304
Aquatic Chronic 2 - H411

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METHANOL **1 - <3%**

CAS number: 67-56-1 EC number: 200-659-6 REACH registration number: 01-2119433307-44-0000

Classification
Flam. Liq. 2 - H225
Acute Tox. 3 - H301
Acute Tox. 3 - H311
Acute Tox. 3 - H331
STOT SE 1 - H370

PROPYL ACETATE **1-5%**

CAS number: 109-60-4 EC number: 203-686-1 REACH registration number: 01-2119484620-39-0000

Classification
Flam. Liq. 2 - H225
Eye Irrit. 2 - H319
STOT SE 3 - H336

4-METHYLPENTAN-2-ONE **1-5%**

CAS number: 108-10-1 EC number: 203-550-1 REACH registration number: 01-2119473980-30-0000

Classification
Flam. Liq. 2 - H225
Acute Tox. 4 - H332
Eye Irrit. 2 - H319
STOT SE 3 - H335

HEPTANE **0.1 - <1%**

CAS number: 142-82-5 EC number: 205-563-8 REACH registration number: 01-2119457603-38-0000

M factor (Acute) = 1 M factor (Chronic) = 1

Classification
Flam. Liq. 2 - H225
Skin Irrit. 2 - H315
STOT SE 3 - H336
Asp. Tox. 1 - H304
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

The full text for all hazard statements is displayed in Section 16.

Composition comments The data shown are in accordance with the latest EC Directives.

Ingredient notes Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List.

CELLULOSE THINNERS STANDARD

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.
If unconscious place in recovery position and seek medical advice.

Inhalation
Remove to fresh air, keep patient warm and at rest.
If breathing is irregular or stopped, administer artificial respiration.

Ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
Keep at rest. Do NOT induce vomiting.

Skin contact
Remove contaminated clothing.
Wash skin thoroughly with soap and water or use recognised skin cleanser.
Do NOT use solvents or thinners.

Eye contact
Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

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

Inhalation
In case of overexposure, organic solvents may depress the central nervous system causing dizziness and intoxication, and at very high concentrations unconsciousness and death.

Ingestion
Ingestion may cause nausea, diarrhoea and vomiting.

Skin contact
Prolonged or repeated contact with skin may cause soreness, irritation or dry skin due to a defatting action.

Eye contact
The liquid splashed in the eyes may cause irritation and reversible damage.

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

Notes for the doctor
No specific recommendations.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
recommended: alcohol resistant foam, CO_2, powders, water spray/mist

Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards
Fire will produce dense black smoke.
Exposure to decomposition products may cause a health hazard.
Appropriate breathing apparatus may be required.

5.3. Advice for firefighters

Protective actions during firefighting
Cool closed containers exposed to fire with water.
Do not allow run-off from fire fighting to enter drains or water courses.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Exclude sources of ignition and ventilate the area.
Avoid breathing vapours.
Refer to protective measures listed in sections 7 and 8.

6.2. Environmental precautions

Environmental precautions Do not allow to enter drains or watercourses.
If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).
Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. Collect and dispose of spillage as indicated in Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions The Manual Handling Operations Regulations may apply to the handling of containers of this product. To assist employers, the following method of calculating the weight for any pack size is given. Take the pack size volume in litres and multiply this figure by the specific gravity value given in Section 9. This will give the net weight of the coating in kilograms. Allowance will then have to be made for the immediate packaging to give an approximate gross weight.
Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits.
In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded.
Electrical equipment should be protected to the appropriate standard.
Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.
Operators should wear anti-static footwear and clothing and floors should be of the conducting type.
Isolate from sources of heat, sparks and open flame.
Non-sparking tools should be used.
Avoid skin and eye contact.
Avoid the inhalation of dust, particulates and spray mist arising from the application of this mixture.
Avoid inhalation of dust from sanding.
Smoking, eating and drinking should be prohibited in application area.
For personal protection see Section 8.
Never use pressure to empty: container is not a pressure vessel.
Always keep in containers of same material as the original one.
Comply with the health and safety at work laws.
Do not allow to enter drains or water courses. Wash hands before eating and before leaving the site.
Remove contaminated clothing and protective equipment before entering eating areas.
Information on fire and explosion protection.
Vapours are heavier than air and may spread along floors.
Vapours may form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

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Storage precautions

Store in accordance with the Dangerous Substances and Explosive Atmospheres Regulations (DSEAR). The requirements are given in the HSE Approved Code of Practice and Guidance, Storage of Dangerous Substances: DSEAR.
The principles contained in the HSE guidance note Chemical Warehousing: The Storage of Packaged Dangerous Substances, should be observed when storing this product. Notes on joint storage.
Store away from oxidising agents, from strongly alkaline and strongly acid materials.
Additional information on storage conditions
Observe label precautions.
Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat and direct sunlight.
Keep container tightly closed.
Keep away from sources of ignition.
No smoking.
Prevent unauthorised access.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

TOLUENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 191 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 384 mg/m³
Sk

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm
Short-term exposure limit (15-minute): WEL 400 ppm

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³
Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 220 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 441 mg/m³
Sk

METHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 616 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 770 mg/m³

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³
Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

BUTANONE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 600 mg/m³
Short-term exposure limit (15-minute): WEL 300 ppm 899 mg/m³
Sk

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BUTYL ACETATE -norm

Long-term exposure limit (8-hour TWA): WEL 150 ppm 724 mg/m³
Short-term exposure limit (15-minute): WEL 200 ppm 966 mg/m³

ISOPROPYL ACETATE

Short-term exposure limit (15-minute): WEL 200 ppm 849 mg/m³

SOLVENT NAPHTHA (PETROLEUM) LIGHT AROMATIC

Long-term exposure limit (8-hour TWA): SUP 25 ppm 120 mg/m³

CYCLOHEXANE

Long-term exposure limit (8-hour TWA): WEL 100 ppm 350 mg/m³
Short-term exposure limit (15-minute): WEL 300 ppm 1050 mg/m³

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

METHANOL

Long-term exposure limit (8-hour TWA): WEL 200 ppm 266 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 333 mg/m³
Sk

PROPYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm 849 mg/m³
Short-term exposure limit (15-minute): WEL 250 ppm 1060 mg/m³

4-METHYLPENTAN-2-ONE

Long-term exposure limit (8-hour TWA): WEL 50 ppm 208 mg/m³
Short-term exposure limit (15-minute): WEL 100 ppm 416 mg/m³
Sk

HEPTANE

Long-term exposure limit (8-hour TWA): WEL 500 ppm
WEL = Workplace Exposure Limit

Sk = Can be absorbed through the skin.
Sk = Can be absorbed through skin.

Ingredient comments According to EH40 - List of approved workplace exposure limits.

TOLUENE (CAS: 108-88-3)

DNEL
Industry - Inhalation; Long term systemic effects: 192 mg/m³
Industry - Inhalation; Short term systemic effects: 384 mg/m³
Industry - Dermal; Long term systemic effects: 384 mg/m³
Consumer - Inhalation; Long term systemic effects: 56.5 mg/m³
Consumer - Inhalation; Short term systemic effects: 226 mg/m³
Consumer - Inhalation; Long term local effects: 56.5 mg/m³
Consumer - Inhalation; Long term local effects: 226 mg/m³
Consumer - Dermal; Long term systemic effects: 226 mg/kg/day
Consumer - Oral; Long term systemic effects: 8.13 mg/kg/day

PNEC
- Fresh water; 0.68 mg/l
- Marine water; 0.68 mg/l
- STP; 13.61 mg/l
- Sediment (Freshwater); 16.39 mg/kg
- Sediment (Marinewater); 16.39 mg/kg
- Soil; 2.89 mg/kg

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ETHYL ACETATE (CAS: 141-78-6)

DNEL

Industry - Inhalation; Long term systemic effects: 734 mg/m³
Industry - Dermal; Long term systemic effects: 63 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 367 mg/m³
Consumer - Dermal; Long term systemic effects: 37 mg/kg/day
Industry - Inhalation; Short term systemic effects: 1468 mg/m³
Consumer - Inhalation; Short term systemic effects: 734 mg/m³
Consumer - Oral; Long term systemic effects: 4.5 mg/kg/day

PNEC

- Fresh water; 0.26
- Soil; 0.148 mg/kg
- Sediment (Freshwater); 1.15 mg/kg
- STP; 650 mg/l
- Intermittent release; 1.65 mg/l
- Sediment (Marinewater); 0.115 mg/kg

ACETONE (CAS: 67-64-1)

DNEL

Industry - Dermal; Long term : 186 mg/kg/day
Industry - Inhalation; Short term : 2420 mg/m³
Industry - Inhalation; Long term : 1210 mg/m³
Consumer - Oral; Long term : 62 mg/kg/day
Consumer - Dermal; Long term : 62 mg/kg/day
Consumer - Inhalation; Long term : 200 mg/m³

PNEC

- Fresh water; 10.6 mg/l
- Sediment (Freshwater); 30.4 mg/kg
- Marine water; 1.06 mg/l
- Sediment, Sediment (Marinewater); 3.04 mg/kg
- Soil; 29.5 mg/l
- STP; 29.5 (100) mg/l
- ; Intermittent releases 21 mg/l

XYLENE (CAS: 1330-20-7)

Biological limit values

650 mmol methyl hippuric acid/mol creatinine in urine. Post shift sampling

DNEL

Industry - Inhalation; Short term systemic effects: 289 mg/m³
Industry - Inhalation; Long term systemic effects: 77 mg/m³
Industry - Inhalation; Short term local effects: 289 mg/m³
Industry - Inhalation; Long term local effects: 77 mg/m³
Industry - Dermal; Short term systemic effects: 174 mg/m³
Consumer - Inhalation; Long term systemic effects: 14.8 mg/m³
Consumer - Inhalation; Short term local effects: 174 mg/m³
Consumer - Inhalation; Short term systemic effects: 174 mg/m³
Consumer - Dermal; Long term systemic effects: 108 mg/kg/day
Consumer - Oral; Long term systemic effects: 1.6 mg/kg/day

PNEC

- Fresh water; 0.327 mg/l
- Marine water; 0.327 mg/l
- Intermittent release; 0.327 mg/l
- Sediment (Freshwater); 12.46 mg/kg
- Sediment (Marinewater); 12.46 mg/kg
- Soil; 2.31 mg/kg
- STP; 6.58 mg/l

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PROPAN-2-OL (CAS: 67-63-0)

DNEL

Industry - Inhalation; Long term systemic effects: 500 mg/m³
Industry - Dermal; Long term systemic effects: 888 mg/m³
Consumer - Inhalation; Long term systemic effects: 89 mg/m³
Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
Consumer - Oral; Long term systemic effects: 26 mg/kg/day

PNEC

- Fresh water; 140.9 mg/l
- Marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- STP; 2251 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- Soil; 28 mg/kg

ETHANOL (CAS: 64-17-5)

DNEL

Industry - Inhalation; Short term local effects: 1900 mg/m³
Industry - Dermal; Long term systemic effects: 343 mg/kg/day
Industry - Inhalation; Long term systemic effects: 950 mg/m³
Consumer - Inhalation; Short term local effects: 950 mg/m³
Consumer - Dermal; Long term systemic effects: 206 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 114 mg/m³
Consumer - Oral; Long term systemic effects: 87 mg/kg/day

PNEC

- Fresh water; 96 mg/l
- Marine water; 0.79 mg/l
- Sediment; 3.6 mg/kg
- Soil; 0.63 mg/kg

BUTANONE (CAS: 78-93-3)

Biological limit values

70 µmol butan-2-one/L in urine Post shift sampling.

DNEL

Industry - Dermal; Long term systemic effects: 1161 mg/kg/day
Industry - Inhalation; Long term systemic effects: 600 mg/m³
Consumer - Dermal; Long term systemic effects: 412 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 106 mg/m³
Consumer - Oral; Long term systemic effects: 31 mg/kg/day

PNEC

- Fresh water; 55.8 mg/l
- Marine water; 55.8 mg/l
- Soil; 22.5 mg/kg
- Intermittent release; 55.8 mg/l
- STP; 709 mg/l
- Sediment (Freshwater); 284.7 mg/kg
- Sediment (Marinewater); 284.7 mg/kg

BUTYL ACETATE -norm (CAS: 123-86-4)

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DNEL

Industry - Inhalation; Short term systemic effects: 960 mg/m³
Industry - Inhalation; Short term local effects: 960 mg/m³
Industry - Inhalation; Long term systemic effects: 480 mg/m³
Industry - Inhalation; Long term local effects: 480 mg/m³
Consumer - Inhalation; Short term systemic effects: 859.7 mg/m³
Consumer - Inhalation; Short term local effects: 859.7 mg/m³
Consumer - Inhalation; Long term systemic effects: 102.34 mg/m³
Consumer - Inhalation; Long term local effects: 102.34 mg/m³

PNEC

- Fresh water; 0.18 mg/l
- Marine water; 0.018 mg/l
- STP; 35.6 mg/l
- Sediment (Freshwater); 0.981 mg/kg
- Sediment (Marinewater); 0.0981 mg/kg
- Soil; 0.0903 mg/kg
- Intermittent release; 35.6 mg/l

HEXANE-norm (CAS: 110-54-3)

DNEL

Industry - Inhalation; Long term systemic effects: 75 mg/m³
Industry - Dermal; systemic effects: 11 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 16 mg/m³
Consumer - Dermal; Long term systemic effects: 5.3 mg/kg/day
Consumer - Oral; Long term systemic effects: 4 mg/kg/day

METHANOL (CAS: 67-56-1)

DNEL

Industry - Dermal; Short term systemic effects: 40 mg/kg/day
Industry - Dermal; Long term systemic effects: 40 mg/kg/day
Industry - Inhalation; Short term systemic effects: 260 mg/m³
Industry - Inhalation; Short term local effects: 260 mg/m³
Industry - Inhalation; Long term systemic effects: 260 mg/m³
Industry - Inhalation; Long term local effects: 260 mg/m³
Consumer - Oral; Short term systemic effects: 8 mg/kg/day
Consumer - Dermal; Short term systemic effects: 8 mg/kg/day
Consumer - Inhalation; Short term systemic effects: 50 mg/m³
Consumer - Inhalation; Long term systemic effects: 50 mg/m³
Consumer - Oral; Long term systemic effects: 8 mg/kg/day

PNEC

- Fresh water; 154 mg/l
- Marine water; 15.4 mg/l
- Soil; 23.5 mg/kg
- STP; 100 mg/l
- Intermittent release; 1540 mg/l
- Sediment (Marinewater); 7.7 mg/kg
- Sediment (Freshwater); 77 mg/kg

PROPYL ACETATE (CAS: 109-60-4)

CELLULOSE THINNERS STANDARD

DNEL

Industry - Inhalation; Long term systemic effects: 420 mg/m³
Industry - Inhalation; Short term systemic effects: 840 mg/m³
Industry - Inhalation; Long term local effects: 420 mg/m³
Industry - Inhalation; Short term local effects: 840 mg/m³
Consumer - Inhalation; Long term systemic effects: 149 mg/m³
Consumer - Inhalation; Short term systemic effects: 298 mg/m³
Consumer - Inhalation; Long term local effects: 149 mg/m³
Consumer - Inhalation; Short term local effects: 298 mg/m³

PNEC

- Fresh water; 0.06 mg/l
- Marine water; 0.006 mg/l
- Intermittent release; 0.6 mg/l
- STP; 1 mg/l
- Sediment (Freshwater); 0.16 mg/kg
- Sediment (Marinewater); 0.016 mg/kg

ISOBUTYL METHYL KETONE (CAS: 108-10-1)

Biological limit values

20 umol 4-methylpentan-2-one/L in urine, 20 umol 4-methylpentan-2-one/L in urine, 20 umol 4-methylpentan-2-one/L in urine

8.2. Exposure controls

Protective equipment

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 solvent vapour below the OEL, suitable respiratory protection must be worn. See Respiratory Equipment below.

Personal protection

Requirements for personal protection can only be determined by performing a risk assessment on a case-by-case basis prior to use. This risk assessment should be reviewed regularly.

Eye/face protection

Use safety eyewear, manufactured/tested to EN 166, and designed to protect against splash of liquids.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. For prolonged or repeated handling, use chemical resistant gloves classified under "Standard EN374: Protective gloves against chemicals and micro-organisms" made from Viton or PVA barrier material.
The breakthrough time must be greater than the end use time of the product.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance and effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

CELLULOSE THINNERS STANDARD

Hygiene measures Provide eyewash station. Do not eat, drink or smoke when using this product. Promptly remove any clothing that becomes contaminated. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

Respiratory protection For processes where spraying is continuous or when spraying for extended periods (greater than 1 hour), compressed air breathing apparatus should always be worn by the spray operators even when good ventilation is provided. For other operators, whether spraying or not, working inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapours. In such circumstances, all operators should also wear compressed air breathing apparatus until such time as the particulates and solvent vapour concentration have fallen below the appropriate occupational exposure limits (see Section 8.1).

When spraying only occurs for short periods of time, less than 1 hour, workers must use, as a minimum, appropriate, certified, full face mask respirators fitted with a combination filter suitable for the removal of both particulates and solvent vapours.

For application by brush or roller, under good conditions of general or local ventilation. particulates are unlikely to be a problem. If solvent vapour concentrations are greater than the occupational exposure limits (see section 8.1), wear, as a minimum, a certified reusable half face mask respirator fitted with a filter suitable for the removal of solvent vapours.

If vigorous application by brush or roller is undertaken that generates airborne mist and particulates, then treat as for spray application.

Enclosed spaces with little or no ventilation: compressed air breathing apparatus should always be worn.

Respiratory protection should not be removed until the particulate and solvent vapour concentrations have fallen below the below the occupational exposure limits or the operator has entered a clean air area.

Compressed air breathing apparatus: e.g. a hood with a supply of compressed air from a clean source or a fan powered reusable full face mask respirator.

Respiratory protection should be selected so that it is suitable for the user, i.e. facial hair may interfere with the effectiveness of half mask or full face mask respirators

Environmental exposure controls Refer to the Environmental Protection Act and the Control of Pollution Act. Do not allow to enter drains or water courses.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Thin liquid.

Colour Clear.

Odour Characteristic.

Odour threshold Not available.

pH Technically not feasible. The product is a non-aqueous mixture.

Melting point -85°C

Initial boiling point and range 55 - 181°C @ 760 mm Hg

Flash point <23°C SCC (Setaflash closed cup).

CELLULOSE THINNERS STANDARD

Evaporation rate	Not determined. (Product is a mixture)
Flammability (solid, gas)	Material is not a solid or gas
Upper/lower flammability or explosive limits	Lower flammable/explosive limit: 0.8 % Upper flammable/explosive limit: 19 %
Vapour pressure	0.2 - 10 kPa @ °C
Vapour density	Heavier than air.
Relative density	0.82 - 0.86 @ 20°C
Solubility(ies)	Partially miscible with water.
Partition coefficient	Not determined.
Auto-ignition temperature	365 - 525°C
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	The product itself is not explosive, but the formation of an explosible mixture of vapour or dust with air is possible.
Oxidising properties	Does not meet the criteria for classification as oxidising.

9.2. Other information

Volatile organic compound	This product contains a maximum VOC content of 820 - 860 g/l . This product contains a maximum VOC content of 100 g/100 g.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Stable under recommended storage and handling conditions (see section 7). When exposed to high temperatures may produce hazardous decomposition products.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions

10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

Materials to avoid	Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions

10.6. Hazardous decomposition products

Hazardous decomposition products	such as carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

CELLULOSE THINNERS STANDARD

ATE oral (mg/kg)	6,329.11
Acute toxicity - dermal	
ATE dermal (mg/kg)	6,938.6
Acute toxicity - inhalation	
ATE inhalation (gases ppm)	420,560.75
ATE inhalation (vapours mg/l)	95.42
ATE inhalation (dusts/mists mg/l)	140.19
Skin corrosion/irritation	
Skin corrosion/irritation	Irritating to skin.
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye irritation
Respiratory sensitisation	
Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitisation	
Skin sensitisation	Based on available data the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity - in vitro	Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	Based on available data the classification criteria are not met.
Reproductive toxicity	
Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Contains toluene - may cause harm to the unborn child Pregnant women should not be exposed to this product.
Specific target organ toxicity - single exposure	
STOT - single exposure	Vapours may cause drowsiness and dizziness.
Target organs	Central nervous system Liver Kidneys Narcotic effects
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure
Target organs	Liver Kidneys
Aspiration hazard	
Aspiration hazard	Based on available data , the classification criteria are not met.
General information	There are no data available on the mixture itself. The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC 1272/2008 and ensuing amendments and classified for toxicological hazards accordingly. See sections 2 and 3 for details.
Inhalation	Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

CELLULOSE THINNERS STANDARD

Ingestion	Ingestion may cause nausea, diarrhoea and vomiting.
Skin contact	Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
Eye contact	Irritating to eyes. Symptoms following overexposure may include the following: Redness. Pain. The liquid splashed in the eyes may cause irritation and reversible damage.
Medical symptoms	Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin.
Medical considerations	This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Toxicological information on ingredients.

TOLUENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,680.0
Species	Rat
Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	5,680.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	25.7
Species	Rat
ATE inhalation (vapours mg/l)	25.7

Skin corrosion/irritation

Animal data	Erythema/eschar score: Well defined erythema (2)., Not fully reversible within Oedema score: Very slight oedema -barely perceptible (1). Irritating to skin. Rabbit

Serious eye damage/irritation

Serious eye damage/irritation	Minimally irritating to the eye (rabbit) Fully reversible within: 7 days

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.

Germ cell mutagenicity

CELLULOSE THINNERS STANDARD

Genotoxicity - in vitro	Gene mutation:: Not mutagenic in AMES Test. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	NOAEL 4522 mg/m³, Inhalation, Rat No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEC 7500 mg/m³, Inhalation, Rat P
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 1875 mg/m³, Inhalation, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	Category 3 , , Narcotic effects

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Category 2 , ,

Aspiration hazard

Aspiration hazard	Aspiration hazard - Category 1 If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours)

ETHYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,394.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	20,000.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	22.5
Species	Rat
Notes (inhalation LC_{50})	LC0 value - no mortality in test. 6 hours exposure
ATE inhalation (vapours mg/l)	22.5

Skin corrosion/irritation

Animal data	Mildly to moderately irritating to skin. (rabbit)

Serious eye damage/irritation

CELLULOSE THINNERS STANDARD

Serious eye damage/irritation	Not irritating.
Respiratory sensitisation	
Respiratory sensitisation	Not sensitising.
Skin sensitisation	
Skin sensitisation	Guinea pig maximization test (GPMT) - Guinea pig: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	NOAEL , , Mouse No evidence of carcinogenicity in animal studies.
Target organ for carcinogenicity	Respiratory system, lungs
Reproductive toxicity	
Reproductive toxicity - fertility	Fertility:, Two-generation study - NOAEL 26400 mg/kg, Oral, Mouse
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 2200 mg/kg/day, Oral, Mouse No dose-related adverse effects on foetuses were observed at doses close to those causing acute maternal toxicity.

ACETONE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	5,800.0
Species	Rat
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	15,800.0
Species	Rabbit
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	76.0
Species	Rat
ATE inhalation (vapours mg/l)	76.0
Skin corrosion/irritation	
Extreme pH	Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation	

CELLULOSE THINNERS STANDARD

Serious eye damage/irritation	May cause corneal damage. Irritating to eyes (rabbit)
Respiratory sensitisation	
Respiratory sensitisation	No information available.
Skin sensitisation	
Skin sensitisation	Not sensitising. Guinea pig
Germ cell mutagenicity	
Genotoxicity - in vivo	: Tests on bacterial or mammalian cell culture did not show mutagenic effects
Carcinogenicity	
Carcinogenicity	Did not show carcinogenic effects in animal experiments.
Reproductive toxicity	
Reproductive toxicity - fertility	Animal testing did not show any effects on fertility
Specific target organ toxicity - single exposure	
STOT - single exposure	No information available.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	No information available.
Aspiration hazard	
Aspiration hazard	Not anticipated to present an aspiration hazard, based on chemical structure.

XYLENE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	4,300.0
Species	Rat
ATE oral (mg/kg)	4,300.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	3,200.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	21.7
Species	Rat
ATE inhalation (vapours mg/l)	11.0
Skin corrosion/irritation	
Animal data	Dose: 24 and, 72 hours, Rabbit Irritating to skin.

CELLULOSE THINNERS STANDARD

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation

Respiratory sensitisation

Respiratory sensitisation	Not sensitising

Skin sensitisation

Skin sensitisation	- Mouse: Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Chromosome aberration: Negative. Ames test: Negative. Gene mutation: Negative.
Genotoxicity - in vivo	Dominant lethal assay, intraperitoneal: Negative.

Carcinogenicity

Carcinogenicity	NOAEL 500 mg/kg, Oral, Rat, male/female Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Reproductive toxicity - fertility	One-generation study - NOAEL >=500 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL 500 ppm, Inhalation, Rat, male/female P Two-generation study - NOAEL >500 ppm, Inhalation, male/female F1 Two-generation study - NOAEL >500 ppm, Inhalation, Rat, male/female F2 This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Maternal toxicity: - NOAEL: 500 ppm, Inhalation, Rat, female

Specific target organ toxicity - single exposure

STOT - single exposure	May cause respiratory irritation.
Target organs	Central nervous system Liver Kidneys

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 150 mg/kg, (3 months), Oral, Rat NOAEL >3.5 mg/l, (3 months), Inhalation, Rat, Dog
Target organs	Kidneys Liver

Aspiration hazard

Aspiration hazard	Aspiration hazard - Category 1 If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours)

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	4,700.0
Species	Rat
Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	4,700.0

Acute toxicity - dermal

CELLULOSE THINNERS STANDARD

Notes (dermal LD_{50})	Based on available data the classification criteria are not met.
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	10,000.0
Species	Rat
Notes (inhalation LC_{50})	6 hours exposure Based on available data the classification criteria are not met.
ATE inhalation (vapours mg/l)	10,000.0
Skin corrosion/irritation	
Animal data	Erythema/eschar score: No erythema (0). Oedema score: No oedema (0). Not irritating. (rabbit)
Serious eye damage/irritation	
Serious eye damage/irritation	Causes serious eye damage
Skin sensitisation	
Skin sensitisation	Buehler test: - Guinea pig: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	Chromosome aberration - micronucleus assay: Negative. This substance has no evidence of mutagenic properties.
Carcinogenicity	
Carcinogenicity	NOAEL 5000 ppm, Inhalation, Rat There is no evidence that the product can cause cancer.
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL 500 mg/kg, Oral, Rat F2a This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Developmental toxicity: - NOAEL: 480 mg/kg, Oral, Rabbit This substance has no evidence of toxicity to reproduction.

ETHANOL

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	10,470.0
Species	Rat
ATE oral (mg/kg)	10,470.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	15,800.0
Species	Rabbit

CELLULOSE THINNERS STANDARD

ATE dermal (mg/kg)	15,800.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	116.9
Species	Rat
ATE inhalation (vapours mg/l)	116.9
Skin corrosion/irritation	
Extreme pH	No skin irritation Rabbit
Serious eye damage/irritation	
Serious eye damage/irritation	Irritating to eyes (rabbit) Fully reversible within: 14 days
Skin sensitisation	
Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: Not sensitising.
Germ cell mutagenicity	
Genotoxicity - in vitro	Gene mutation:: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Carcinogenicity	
Carcinogenicity	NOAEL >3000 mg/kg, Oral, Rat Based on available data, classification criteria are not met
Reproductive toxicity	
Reproductive toxicity - fertility	Two-generation study - NOAEL > 20.7 g/kg/day, Oral, Mouse This substance has no evidence of toxicity to reproduction.
Reproductive toxicity - development	Teratogenicity: - NOAEL: >=20000 ppm, Inhalation, Rat
Specific target organ toxicity - single exposure	
STOT - single exposure	Not applicable.
Specific target organ toxicity - repeated exposure	
STOT - repeated exposure	Not available.
Aspiration hazard	
Aspiration hazard	Based on available data the classification criteria are not met.

BUTANONE

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	2,194.0
Species	Rat
ATE oral (mg/kg)	2,194.0

CELLULOSE THINNERS STANDARD

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,000.0
Species	Rabbit
Notes (dermal LD_{50})	Moderately irritating.
ATE dermal (mg/kg)	5,000.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	34.0

Skin corrosion/irritation

Animal data	Dose: No skin irritation, 4 hours, Rabbit OECD Test Guideline 404

Serious eye damage/irritation

Serious eye damage/irritation	Severely irritating (rabbit) OECD Test Guideline 405

Respiratory sensitisation

Respiratory sensitisation	Guinea Pig. There is no evidence that the material can lead to respiratory hypersensitivity.

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - : Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	: Negative. Not mutagenic in AMES Test.

Carcinogenicity

Carcinogenicity	Not expected to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility	Not expected to impair fertility.

Specific target organ toxicity - single exposure

STOT - single exposure	Vapours may cause drowsiness and dizziness. Experience with human exposure
Target organs	Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Defatting, drying and cracking of skin.
Target organs	Skin

Aspiration hazard

Aspiration hazard	Classification criteria not met.

Medical symptoms	Skin irritation. Irritation of eyes and mucous membranes. Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following overexposure may include the following: Headache. Coughing. Drowsiness, dizziness, disorientation, vertigo. Fatigue. Nausea, vomiting. Dryness of mouth and throat.

CELLULOSE THINNERS STANDARD

Medical considerations	Skin disorders and allergies. Convulsions. Central nervous system depression. Aspiration hazard if swallowed. Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis.

BUTYL ACETATE -norm

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	10,760.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	14,112.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	23.4
Species	Rat
ATE inhalation (vapours mg/l)	23.4

Skin corrosion/irritation

Animal data	OECD Test Guideline 404 No skin irritation (rabbit)

Serious eye damage/irritation

Serious eye damage/irritation	No eye irritation OECD 405 rabbit

Respiratory sensitisation

Respiratory sensitisation	No information available.

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - : Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Chromosome aberration: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration - micronucleus assay: Negative. Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Did not show carcinogenic effects in animal experiments.

Reproductive toxicity

Reproductive toxicity - fertility	Fertility: - NOAEC 3615 mg/m³, Inhalation, Rat
Reproductive toxicity - development	Developmental toxicity: - LOAEC: 7230 mg/m³, Inhalation, Rat

Specific target organ toxicity - single exposure

CELLULOSE THINNERS STANDARD

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEC 500 ppmV/6hr/day, Inhalation, Rat

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

HEXANE-norm

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	16.0
Species	Rat
Notes (oral LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	2,000.0
Species	Rabbit
Notes (dermal LD_{50})	Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} gases ppmV)	5,000.0
Species	Rat
Notes (inhalation LC_{50})	24 hours Based on available data the classification criteria are not met.
ATE inhalation (gases ppm)	5,000.0

Skin corrosion/irritation

Animal data	Primary dermal irritation index: 1.92 Irritating to skin. (rabbit)

Serious eye damage/irritation

Serious eye damage/irritation	No eye irritation OECD 405 rabbit

Skin sensitisation

Skin sensitisation	Local Lymph Node Assay (LLNA) - Mouse: No evidence of a skin sensitizing potential.

Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Chromosome aberration: Animal testing did not show any mutagenic effects Mouse Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	NOAEL >9016 ppm, Inhalation, Rat

Reproductive toxicity

CELLULOSE THINNERS STANDARD

Reproductive toxicity - fertility	Fertility: - NOAEL 5000 ppm, Inhalation, Rat Suspected of damaging fertility.
Reproductive toxicity - development	Developmental toxicity: - LOAEC: 200 ppm, Inhalation, Mouse Suspected of damaging the unborn child.

METHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	7,000.0
Species	Monkey

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	17,100.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	43.68
Species	Monkey
Notes (inhalation LC_{50})	6 hours exposure
ATE inhalation (vapours mg/l)	43.68

Skin corrosion/irritation

Animal data	No skin irritation (rabbit)

Serious eye damage/irritation

Serious eye damage/irritation	Not irritating.

Respiratory sensitisation

Respiratory sensitisation	: Not determined.

Skin sensitisation

Skin sensitisation	Guinea pig maximization test (GPMT) - : Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Ames test: Negative. This substance has no evidence of mutagenic properties.
Genotoxicity - in vivo	Chromosome aberration: Negative. This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity	NOAEC >1.3 mg/l, Inhalation, Mouse

Reproductive toxicity

Reproductive toxicity - fertility	Fertility - NOAEL 1.33 mg/l, Oral, Rat P Based on available data, the classification criteria are not met.

CELLULOSE THINNERS STANDARD

Reproductive toxicity - development	Teratogenicity: - NOAEC: 6.65 mg/l, Inhalation, Vapour, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	, Oral, Human Causes damage to organs Experience with human exposure

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not available.

Aspiration hazard

Aspiration hazard	No aspiration hazard expected. Classification criteria not met.

PROPYL ACETATE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	8,700.0
Species	Rat

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	17,800.0
Species	Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} vapours mg/l)	32.0
Species	Rat
ATE inhalation (vapours mg/l)	32.0

Skin corrosion/irritation

Animal data	Erythema/eschar score: Very slight erythema - barely perceptible (1). Oedema score: No oedema (0). Not irritating.

Serious eye damage/irritation

Serious eye damage/irritation	Slightly irritating - may cause slight corneal injury

Skin sensitisation

Skin sensitisation	Not sensitising.

Germ cell mutagenicity

Genotoxicity - in vitro	Bacterial reverse mutation test: Negative. Based on available data the classification criteria are not met.
Genotoxicity - in vivo	Not available.

Carcinogenicity

Carcinogenicity	Not available.

Reproductive toxicity

CELLULOSE THINNERS STANDARD

Reproductive toxicity - fertility	Two-generation study - NOAEC 2000 mg/kg, Oral, Rat P Based on available data, the classification criteria are not met.
Reproductive toxicity - development	Developmental toxicity: - NOAEC: 750 ppm, Inhalation, Rat Based on available data, classification criteria are not met

SECTION 12: Ecological Information

Ecotoxicity There are no data available on the mixture itself. The mixture has been assessed following the method according to the "Classification, labelling and packaging of substances and mixtures" EC1272/2008 and ensuing amendments and is classified for ecotoxicological properties accordingly. See sections 2 and 3 for details. Do not allow to enter drains or water courses.

12.1. Toxicity

Toxicity There is no toxicity data for the mixture itself.

Ecological information on ingredients.

TOLUENE

Acute toxicity - fish	LC50, 96 hours: 5.5 mg/l, Oncorhynchus kisutch (Coho salmon)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.78 mg/l, Ceriodaphnia dubia NOEC, : 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 3 hours: 134 mg/l, Chlamydomonas angulosa
Acute toxicity - microorganisms	EC_{50}, 24 hours: 84 mg/l, Activated sludge
Chronic toxicity - fish early life stage	NOEC, 40 days: 1.4 mg/l,
Chronic toxicity - aquatic invertebrates	NOEC, 7 days: 0.74 mg/l, Daphnia magna

ETHYL ACETATE

Acute toxicity - fish	LC_{50}, 96 hours: 230 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 24 hours: 3090 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 72 hours: >100 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	EC_{50}, 15 minutes: 1500 mg/l, Pseudomonas fluorescens

ACETONE

Acute toxicity - fish	LC_{50}, 96 hours: 6120 mg/l, Pimephales promelas (Fat-head Minnow) LC_{50}, 96 hours: 5540 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 8800 mg/l mg/l, Daphnia magna

CELLULOSE THINNERS STANDARD

Acute toxicity - aquatic plants	NOEC, 96 hours: 430 mg/l mg/l, Algae
Acute toxicity - microorganisms	EC12, 30 min: 1000 mg/l, Activated sludge
Chronic toxicity - aquatic invertebrates	NOEC, 28 days: 2212 mg/l, Daphnia magna

XYLENE

Acute toxicity - fish	LC_{50}, 96 hours: 2.6 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.82 mg/l, Daphnia magna
Acute toxicity - aquatic plants	IC_{50}, 72 hours: 2.2 mg/l, Freshwater algae
Acute toxicity - microorganisms	EC_{50}, 24 hours: 96 mg/l, Bacteria

PROPAN-2-OL

Acute toxicity - fish	LC_{50}, 96 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 2285 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 7 days: 1800 mg/l, Scenedesmus subspicatus
Acute toxicity - microorganisms	Toxicity threshold, 16 hours: 1050 mg/l, Pseudomonas putida

ETHANOL

Acute toxicity - fish	LC_{50}, 96 hours: 15300 mg/l, Pimephales promelas (Fat-head Minnow) LC_{50}, 24 hours: 11200 mg/l, Onchorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 10000 mg/l, Daphnia magna EC_{50}, 24 hours: 858 mg/l, Artemia salina
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 275 mg/l, Chlorella vulgaris EC10, 72 hours: 11.5 mg/l, Chlorella vulgaris
Acute toxicity - microorganisms	EC_{50}, 24 hours: 5800 mg/l, Paramaecium caudatum EC_{50}, 16 hours: 6500 mg/l, Pseudomonas putida
Acute toxicity - terrestrial	LC_{50}, 48 hours: >1 mg/cm2 , Eisenia Fetida (Earthworm)

BUTANONE

Acute toxicity - fish	LC_{50}, 48 hours: > 100 mg/l, Leuciscus idus (Golden orfe) LC_{50}, 96 hours: 2993 mg/l, Pimephales promelas (Fat-head Minnow) OECD Guideline for Testing of Chemicals, No.203
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 308 mg/l, Daphnia magna OECD Test Guideline 202

CELLULOSE THINNERS STANDARD

Acute toxicity - aquatic plants	EC_{50}, 96 hours: 2029 mg/l, Scenedesmus subspicatus OECD Test Guideline 201
Acute toxicity - microorganisms	EC_{0}, 16 hours: 1150 mg/l, Pseudomonas putida
Acute toxicity - terrestrial	Not known.

BUTYL ACETATE -norm

Acute toxicity - fish	LC_{50}, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow) OECD Guideline for Testing of Chemicals, No.203
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 44 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 647.7 mg/l, Scenedesmus subspicatus NOEC, 72 hours: 200 mg/l, Scenedesmus subspicatus

CYCLOHEXANE

Acute aquatic toxicity	
LE(C)$_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Chronic aquatic toxicity	
NOEC	0.001 < NOEC ≤ 0.01
Degradability	Rapidly degradable
M factor (Chronic)	1

HEXANE-norm

Acute toxicity - fish	LC_{50}, 48 hours: > 1 mg/l, Oryzias latipes (Red killifish)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 3.51 mg/l, Daphnia magna
Acute toxicity - aquatic plants	NOEC, 72 hours: 3.014 mg/l, Selenastrum capricornutum Read across data
Acute toxicity - microorganisms	EC_{50}, 48 hours: 48.39 mg/l, Tetrahymena pyriformis

METHANOL

Acute toxicity - fish	LC_{50}, 96 hours: 15400 mg/l, Lepomis macrochirus (Bluegill)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: > 1000 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 22000 mg/l, Freshwater algae
Acute toxicity - microorganisms	IC_{50}, 3 hours: >1000 mg/l, Activated sludge
Acute toxicity - terrestrial	LC_{50}, 48 hours: >0.1 - <1 mg/cm², Eisenia Fetida (Earthworm)

CELLULOSE THINNERS STANDARD

PROPYL ACETATE

Acute toxicity - fish	LC_{50}, 96 hours: 60 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 91.5 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 72 hours: 672 mg/l, Selenastrum capricornutum NOEC, 72 hours: 83.2 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC_{50}, 16 hours: >1000 mg/l, Activated sludge

HEPTANE

Acute aquatic toxicity	
LE(C)$_{50}$	0.1 < L(E)C50 ≤ 1
M factor (Acute)	1
Chronic aquatic toxicity	
NOEC	0.01 < NOEC ≤ 0.1
Degradability	Non-rapidly degradable
M factor (Chronic)	1

12.2. Persistence and degradability

Persistence and degradability There is no data for the mixture itself.

Ecological information on ingredients.

TOLUENE

Persistence and degradability	The product is readily biodegradable
Biodegradation	Degradation (%) - 69: 5 days - Degradation (%) 81: 5 days

ETHYL ACETATE

Persistence and degradability	The product is readily biodegradable.
Stability (hydrolysis)	pH5 - Half-life : 16 years @ 24.9°C pH7 - Half-life : 24 months @ 24.9°C pH9 - Half-life : 7.5 days @ 24.9°C The substance is effectively stable to degradation by hydrolysis .under any environmental conditions likely to be experienced.
Biodegradation	Water - Degradation (%) 62%: 5 days Water - Degradation (%) 99%: 6 days The substance is readily biodegradable.
Biological oxygen demand	COD5 = 1.69 g O_2/g substance

ACETONE

CELLULOSE THINNERS STANDARD

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Water - Degradation (%) 91: 28 days OECD Test Guideline 301B - Degradation (%) 84: 20 days Readily biodegradeable
Biological oxygen demand	1900 mg/g (Incubation time - 5 days)
Chemical oxygen demand	2100 mg/g

XYLENE

Persistence and degradability	Readily biodegradable
Biodegradation	- Degradation % >60: 28 days Readily biodegradable

PROPAN-2-OL

Persistence and degradability	The product is readily biodegradable.
Biodegradation	Water - Degradation (%) 53%: 5 days The substance is readily biodegradable.
Chemical oxygen demand	2.23 g O_2/g substance

ETHANOL

Biodegradation	- Degradation (%) 70%: 5 days Readily biodegradable
Biological oxygen demand	0.100 g O_2/g substance
Chemical oxygen demand	1.9 g O_2/g substance

BUTANONE

Persistence and degradability	The product is biodegradable.
Biodegradation	- Degradation (%) 98%: 28 days The substance is readily biodegradable.

BUTYL ACETATE -norm

Persistence and degradability	Readily biodegradable
Biodegradation	Water - Degradation (%) 83: 28 days

HEXANE-norm

Persistence and degradability	Readily biodegradable

CELLULOSE THINNERS STANDARD

Biodegradation	- Degradation (%) 83%: 10 days The substance is readily biodegradable.

METHANOL

Biodegradation	Water - Degradation (%) 71.5: 3 days Water - Degradation (%) 46.3: 5 days Water - Degradation (%) 95: 20 days

PROPYL ACETATE

Persistence and degradability	The product is readily biodegradable
Phototransformation	Water - DT_{50} : 5 days
Biodegradation	- Degradation (%) 62%: 5 days

12.3. Bioaccumulative potential

Bioaccumulative potential	There is no data for the mixture itself.
Partition coefficient	Not determined.

Ecological information on ingredients.

TOLUENE

Bioaccumulative potential	Potential for bioaccumulation is low. BCF: 90,
Partition coefficient	log Pow: 2.65

ETHYL ACETATE

Bioaccumulative potential	No data available on bioaccumulation. BCF: 30,
Partition coefficient	: 0.68

ACETONE

Bioaccumulative potential	The product is not bioaccumulating. BCF: 3,
Partition coefficient	log Kow: -0.24

XYLENE

Bioaccumulative potential	Not expected to bioaccumulate. BCF: 25.9,
Partition coefficient	log Pow: 3.15

PROPAN-2-OL

Bioaccumulative potential	The product is not bioaccumulating.

ETHANOL

Bioaccumulative potential	Not expected to bioaccumulate.

BUTANONE

CELLULOSE THINNERS STANDARD

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Pow: 0.3 @ 40°C

BUTYL ACETATE -norm

Bioaccumulative potential The product is not bioaccumulating.

Partition coefficient log Kow: 2.3 OECD Test Guideline 117

HEXANE-norm

Bioaccumulative potential BCF: 501, Pimephales promelas (Fat-head Minnow)

METHANOL

Bioaccumulative potential BCF: < 10,

Partition coefficient log Pow: < 1 Low potential bioaccumulation

12.4. Mobility in soil

Mobility There is no data on the mobility of the mixture itself.

Ecological information on ingredients.

ETHYL ACETATE

Mobility The product is soluble in water.

Surface tension 24 mN/m @ 20°C

ACETONE

Mobility The product is soluble in water. The product contains volatile organic compounds (VOCs) which will evaporate easily from all surfaces.

Adsorption/desorption coefficient Water - : 1.5 @ 20°C

Henry's law constant 3311 Pa m3/mol @ 25°C

XYLENE

Mobility The product contains volatile solvents which are immiscible with water and will evaporate into the atmosphere. In soil the product has only slight mobility and will partially evaporate

PROPAN-2-OL

Mobility The product is soluble in water.

ETHANOL

Mobility Not expected to absorb on soil.

Henry's law constant 0.461 Pa m3/mol @ °C Read across data

BUTANONE

CELLULOSE THINNERS STANDARD

Mobility Expected to remain in water. Expected to migrate through soil. The product is soluble in water.

Surface tension 25 mN/m @ 20°C

BUTYL ACETATE -norm

Surface tension 61.3 mN/m @ 20°C OECD Test Guideline 115

HEXANE-norm

Adsorption/desorption coefficient - log Koc: 3.34 @ °C

METHANOL

Mobility The product is soluble in water.

PROPYL ACETATE

Adsorption/desorption coefficient - log Koc: 1.053 @ °C Estimated value.

Henry's law constant 22.08994 Pa m3/mol @ @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not allow to enter drains or water courses.

Disposal methods Waste and emptied containers are controlled wastes and should be disposed of in accordance with The Environment Protection (Duty of Care) Regulations" (in England, Scotland, Wales) or The Controlled Waste (Duty of Care) Regulations (in Northern Ireland).

Waste class The European List of Wastes classification of this product, when disposed of as waste is:
Waste Code: Name of Waste (according to Decision 2000/532/EC):

08 01 11 Waste paint and varnish containing organic solvents or other dangerous substances If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information contact your local waste authority. Using information provided in this safety data sheet, advice should be obtained from the local waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of empty containers contaminated by the product in accordance with local or national legal provisions.

SECTION 14: Transport information

General This section contains basic classification information; specific information is not provided for all transport modes if not relevant for the product as supplied. Relevant modal regulations should be consulted if the product is transported onwards.

CELLULOSE THINNERS STANDARD

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT RELATED MATERIAL (Cyclohexane and heptane)

14.3. Transport hazard class(es)

3

ADR/RID label 3

Transport labels

14.4. Packing group

PG II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

14.6. Special precautions for user

Transport within the user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accident or spillage.

EmS F-E, S-E

Tunnel restriction code (D/E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant.

SECTION 15: Regulatory information

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

National regulations The information in this Safety Data Sheet is required pursuant to the provisions of the Health and Safety at Work etc. Act and the Control of Substances Hazardous to Health Regulations which apply to the use of this product at work.
Control of Pollution Act 1974.
The Environmental Protection (Duty of Care) Regulations 1992 and amendments
The Waste (England and Wales) Regulations 2011 (SI 2011 No. 988)
The Dangerous Substances & Explosive Atmospheres Regulations 2002(SI 2002:2776).
The Manual Handling Operations Regulations 1992, (SI 1992:2793)and amendment, The Stationery Office.
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

CELLULOSE THINNERS STANDARD

EU legislation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Waste Framework Directive (Directive 2008/98/EC on waste) and amendments Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. This product may add to the calculation for determining whether a site is within scope of the Seveso Directive on major accident hazards.
Guidance	COSHH Essentials: easy steps to control chemicals, on-line guidance at http://www.hse.gov.uk/coshh/essentials/index.htm Chemical Warehousing: Storage of Flammable Liquids in Containers, HSG51, HSE Storage: Packaged Dangerous Substances HSG71, HSE. Working with solvents: A guide to safe working practices, INDG273(rev1), HSE Best Practice Guideline 5 "Safe Use of Gloves (June 2010) published by the European Solvents Industry Group (ESIG) available at www.esig.org/en/library/publications/best-practice-guides Control of Substances Hazardous to Health (Fifth Edition) (HSE Books L5) Dangerous Substances and Explosive Atmospheres Regulations 2002, (HSE Books L138) Safe use and handling of flammable liquids HSG140 (Second edition), HSE A step by step guide to COSHH assessment HSG97, HSE Respiratory protective equipment at work: A practical guide, HSG53, HSE BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents
Restrictions (Title VIII Regulation 1907/2006)	Entry 48 in Table XVII restricting the placing on the market of substances and mixtures containing >0.1% toluene for supply to the general public.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

CELLULOSE THINNERS STANDARD

Abbreviations and acronyms used in the safety data sheet

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ATE: Acute Toxicity Estimate.
BCF: Bioconcentration Factor.
CAS: Chemical Abstracts Service.
CLP: Classification, Labelling, Packaging Regulation; Regulation (EC) No. 1272/2008
CMR: Carcinogen, Mutagen or Reproductive Toxicant
COSHH: Control of Substances Hazardous to Health Regulations
DNEL: Derived No Effect Level.
EC: European Community
ECHA: European Chemicals Agency
EC No.: EINECS (European Inventory of Existing Commercial Substances) and ELINCS (European List of Notified Substances) Number
EC_{50}: 50% of maximal Effective Concentration.
EmS: Emergency Schedule (IMDG)
EU: European Union
GHS: Globally Harmonized System.
IATA: International Air Transport Association.
ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
Kow: Octanol-water partition coefficient.
LC_{50}: Lethal Concentration to 50 % of a test population.
LD_{50}: Lethal Dose to 50% of a test population (Median Lethal Dose).
LOAEC: Lowest Observed Adverse Effect Concentration.
LOAEL: Lowest Observed Adverse Effect Level.
LOEC: Lowest Observed Effect Concentration.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No Observed Adverse Effect Level.
NOEC: No Observed Effect Concentration.
OECD: Organisation for Economic Co-operation and Development
OEL: Occupational Exposure Limit
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
SDS: Safety Data Sheet
STOT: Specific Target Organ Toxicity
(STOT) RE: Repeated Exposure
(STOT) SE: Single Exposure
STP: Sewage Treatment Plant
SVHC: Substances of Very High Concern.
UN: United Nations.
VOC: Volatile Organic Compound
vPvB: Very Persistent and Very Bioaccumulative.

General information

The product should not be used for purposes other than those shown in Section 1.

Key literature references and sources for data

Raw material supplier's Safety Data Sheets. Reference to ECHA Registered Substance dossiers.

Classification procedures according to Regulation (EC) 1272/2008

Unless indicated elsewhere in this safety data sheet, the classification of this mixture has been determined using a combination of test data, bridging principles and calculation.

CELLULOSE THINNERS STANDARD

Revision comments	CLP 1.01 CHIP classification data removed Amended to meet recommendations described in CEPE Phrase Catalogue version 10. This issue replaces Issue CLP 1.00 CLP 1.00 This revision is the first to meet the requirements of the "Classification, labelling and packaging of substances and mixtures (CLP) Regulation" EC 1272/2008 and ensuing adaptations to August 2013 Whilst the product itself has not changed, this issue takes into account its reclassification as a consequence of the CLP regulations (see Section 2). Additional information added to Sections 8.1, 8.2, 9.1, 11 and 12. This issue replaces issue 8.00 NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	Chief Chemist
Revision date	12/05/2016
Revision	CLP 1.01
Supersedes date	14/05/2015
SDS number	10408
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H301 Toxic if swallowed. H304 May be fatal if swallowed and enters airways. H311 Toxic in contact with skin. H312 Harmful in contact with skin. H315 Causes skin irritation. H319 Causes serious eye irritation. H331 Toxic if inhaled. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H361d Suspected of damaging the unborn child. H361f Suspected of damaging fertility. H370 Causes damage to organs . H373 May cause damage to organs through prolonged or repeated exposure. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects.

The information of this SDS is based on the present state of our knowledge and on current legislation.
It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.
The product should not to be used for purposes other than those shown in section 1 without first referring to the supplier and obtaining written handling instructions.
As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.
The information in this safety data sheet does not constitute the user's own assessment of workplace risks as required by other health and safety legislation.