SAFETY DATA SHEET
CELLULOSE SANDING SEALER CLEAR

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 SANDING SEALER CLEAR

Product number CSSCLERXX

Product SUMI code BBBEX

Product SUMI version number 1.00

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

Identified uses RESTRICTED TO INDUSTRIAL AND PROFESSIONAL USE ONLY. An air-drying, liquid, solvent-borne paint for industrial and professional use. For wood finishing, apply by manual spray. Read product data sheet and container label.

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: 111 in UK, 01 809 2166 in Republic of Ireland

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 STOT SE 3 - H336 STOT RE 2 - H373

Environmental hazards Not Classified

2.2. Label elements

CELLULOSE SANDING SEALER CLEAR

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. H373 May cause damage to organs through prolonged or repeated exposure.
Precautionary statements	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P261 Avoid breathing vapour/ spray. 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. P314 Get medical advice/ attention if you feel unwell. P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.
Contains	BUTANONE, ETHYL ACETATE, XYLENE, n-BUTYL ACETATE
Supplementary precautionary statements	P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical equipment. P242 Use non-sparking tools. P243 Take action to prevent static discharges. P260 Do not breathe vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. 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 or shower. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P312 Call a POISON CENTRE/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. P403+P233 Store in a well-ventilated place. Keep container tightly closed. 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

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

SECTION 3: Composition/information on ingredients

3.2. Mixtures

CELLULOSE SANDING SEALER CLEAR

BUTANONE **20-40%**

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

ETHYL ACETATE **10-25%**

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

XYLENE **10-25%**

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

n-BUTYL ACETATE **1-5%**

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

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

PROPAN-2-OL **1-5%**

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

CELLULOSE SANDING SEALER CLEAR

BUTAN-1-OL		**1-5%**
CAS number: 71-36-3	EC number: 200-751-6	REACH registration number: 01-2119484630-38-XXXX

Classification
Flam. Liq. 3 - H226
Acute Tox. 4 - H302
Skin Irrit. 2 - H315
Eye Dam. 1 - H318
STOT SE 3 - H335, 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

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.

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.

CELLULOSE SANDING SEALER CLEAR

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, CO2, powders, water spray/mist

Unsuitable extinguishing media Do not use water jet as extinguisher, as this may 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. Mixtures containing nitrocellulose, which as an oxygen donor, may smoulder and burn in the absence of air and even under water.

Hazardous combustion products In case of fire, toxic gases (CO, CO2, NOx) may be formed.

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

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

CELLULOSE SANDING SEALER CLEAR

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. Due to the nitrocellulose content of this product, spray dusts and deposits have a low flammability threshold. The product should not be sprayed in the same booth as coatings that generate heat during drying (for instance air drying or forced dry auto-oxidising alkyds, styrenated alkyds or polyesters, etc), unless the spray booth and exhaust ducting are completely cleaned between each product change. Do not mix with other wastes

7.2. Conditions for safe storage, including any incompatibilities

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 amines, oxidising agents, and 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.

CELLULOSE SANDING SEALER CLEAR

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

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

ETHYL ACETATE

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

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

n-BUTYL ACETATE

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

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

BUTAN-1-OL

Short-term exposure limit (15-minute): 50 ppm 154 mg/m³ vapour
Sk

ETHANOL

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

WEL = Workplace Exposure Limit
Sk = Can be absorbed through the skin.

Ingredient comments For dust the 8 hour TWA's are:-
Respirable dust 4 mg/cu.m (WEL)
Total inhalable dust 10 mg/cu.m (WEL)

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

CELLULOSE SANDING SEALER CLEAR

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

ETHYL ACETATE (CAS: 141-78-6)

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

PNEC
- Fresh water; 0.24 mg/l
- Marine water; 0.024 mg/l
- Sediment (Freshwater); 1.15 mg/kg
- Sediment (Marinewater); 0.115 mg/kg
- Soil; 0.148 mg/kg
- STP; 650 mg/l
- Intermittent release; 1.65 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

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

CELLULOSE SANDING SEALER CLEAR

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; 0.36 mg/l

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

BUTAN-1-OL (CAS: 71-36-3)

DNEL

Industry - Inhalation; Long term local effects: 310 mg/m³
Industry - Inhalation; : 100 ppm
Consumer - Inhalation; Long term local effects: 55 mg/m³
Consumer - Oral; Long term systemic effects: 3125 mg/kg/day

PNEC

- Fresh water; 0.082 mg/l
- Marine water; 0.0082 mg/l
- Intermittent release; 2.25 mg/l
- STP; 2476 mg/l
- Sediment (Freshwater); 0.178 mg/kg
- Sediment (Marinewater); 0.0178 mg/kg
- Soil; 0.015 mg/kg

ETHANOL (CAS: 64-17-5)

CELLULOSE SANDING SEALER CLEAR

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

DIOCTYL ADIPATE (CAS: 103-23-1)

DNEL	Industry - Dermal; Long term : 25.5 mg/kg/day Industry - Inhalation; Long term : 17.8 mg/m³ Consumer - Dermal; Long term : 13 mg/kg/day Consumer - Inhalation; Long term : 4.4 mg/m³ Consumer - Oral; Long term : 1.3 mg/kg/day
PNEC	- Fresh water; 0.0032 mg/l - Marine water; 0.0032 mg/l - STP; 35 mg/l - Sediment; 15.6 mg/kg - Soil; 0.865 mg/kg

8.2. Exposure controls

Protective equipment

Safe use of mixture	This Safety Data Sheet should be read in conjunction with the Safe Use of Mixture (SUMI) report referred to in Section 1. The SUMI provides information collated from exposure scenarios of substances relevant to this product and is provided as part of our obligations under REACH Regulations.
Two-pack product protection	Not applicable
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. Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used. 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.

CELLULOSE SANDING SEALER CLEAR

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. 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.

Hygiene measures

Provide eyewash station. Do not eat, drink or smoke when using this product. Promptly remove any clothing that becomes contaminated. Wash 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

Selection of any respiratory protective equipment should ensure that it is adequate to reduce exposure to protect the worker's health and is suitable for the wearer, task and environment, including consideration of the facial features of the wearer.
* Spraying should be undertaken outdoor or in a vented booth. As a minimum, workers should wear a full face respirator to EN140, fitted with a filter suitable for both particulates and vapours, to EN14387, with an assigned protection factor 20 (e.g. A2/P3). A powered full face respirator with combined filter A2/P3 (APF 40) or compressed air breathing apparatus should be worn if used continuously more than 1 hour. Respirators must be worn by anyone in the booth or room during spraying, gun cleaning (spray-to-dry) and throughout the clearance time, until such time as the particulates and solvent vapour concentration have fallen below the appropriate occupational exposure limits.
* Brush or roller applications should be carried out outdoor or in good ventilation areas with 10 to 15 air changes per hour or more. As a minimum, a half face mask respirator with combined filter A2/P3 (APF 20) should be worn. A powered full face respirator with combined filter A2/P3 (APF 40) should be used, if used for more than 1 hour continuously as half face powered respirator are not recommended.
* For other operations: If workers could be exposed to concentration above the exposure limit or where ventilation is poor, they must use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours, to EN 14387, with an assigned protection factor of at least 10 (e.g. A2/P3).
* 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 occupational exposure limits or the operator has entered a clean air area.
Fit testing and regular servicing is recommended for all respiratory protective equipment.
The use of HSE website is strongly recommended in selecting the most appropriate RPE
http://www.healthyworkinglives.com/rpe-selector

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

CELLULOSE SANDING SEALER CLEAR

Appearance	Thin liquid.
Colour	Colourless.
Odour	Characteristic.
Odour threshold	Not determined.
pH	Not applicable. The product is a non-aqueous mixture.
Melting point	-86°C
Initial boiling point and range	80 - 142°C @ 760 mm Hg
Flash point	<21°C Setaflash closed cup.
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: 1.0 % Upper flammable/explosive limit: 12 %
Vapour pressure	0.9 - 10 kPa @ 20°C
Vapour density	Heavier than air.
Relative density	0.91 - 0.93 @ 20°C
Solubility(ies)	Partially miscible with water.
Partition coefficient	Not relevant. : Product is a mixture. See Section 12 for partition coefficient data on individual components.
Auto-ignition temperature	370°C
Decomposition Temperature	Not determined.
Viscosity	24 - 26 secs BS B4 Flow Cup @ 20°C
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 675 g/litre. This product contains a maximum VOC content of 73 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 amines, oxidising agents, strongly alkaline and strongly acidic materials in order to avoid exothermic reactions

10.4. Conditions to avoid

CELLULOSE SANDING SEALER CLEAR

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 Aluminium, copper or brass, acids or acidic resins, amines/aminoalcohols or amino-resins, oxidizing agents may cause exothermic reaction (generating heat and fumes) and/or self-ignition by catalytic decomposition with cellulose nitrate.

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

ATE oral (mg/kg) 20,325.2

Acute toxicity - dermal

ATE dermal (mg/kg) 8,079.35

Acute toxicity - inhalation

ATE inhalation (gases ppm) 49,210.57

ATE inhalation (vapours mg/l) 202.72

ATE inhalation (dusts/mists mg/l) 73.45

Skin corrosion/irritation

Skin corrosion/irritation May cause skin irritation.

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 Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met. Vapours may cause drowsiness and dizziness.

CELLULOSE SANDING SEALER CLEAR

Target organs	Central nervous system

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Target organs	Central nervous system 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.
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.

BUTANONE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,300.0
Species	Rat
ATE oral (mg/kg)	3,300.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	6,400.0
Species	Rabbit
Notes (dermal LD_{50})	Moderately irritating.
ATE dermal (mg/kg)	6,400.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l)	34.0

CELLULOSE SANDING SEALER CLEAR

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 There is no evidence that the product can cause cancer.

Reproductive toxicity

Reproductive toxicity - fertility This substance has no evidence of toxicity to reproduction.

Reproductive toxicity - development This substance has no evidence of toxicity to reproduction.

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.
NOAEL 5014 ppm, Inhalation, Rat

Target organs Skin

Aspiration hazard

Aspiration hazard Entry into the lungs following ingestion or vomiting may cause chemical pneumonitis. 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.

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.

ETHYL ACETATE

Acute toxicity - oral

CELLULOSE SANDING SEALER CLEAR

Acute toxicity oral (LD_{50} mg/kg)	6,100.0
Species	Rat
ATE oral (mg/kg)	6,100.0
Acute toxicity - dermal	
Acute toxicity dermal (LD_{50} mg/kg)	20,000.0
Species	Rabbit
ATE dermal (mg/kg)	20,000.0
Acute toxicity - inhalation	
Acute toxicity inhalation (LC_{50} vapours mg/l)	29.3
Species	Rat
Notes (inhalation LC_{50})	LC0 value - no mortality in test. 6 hours exposure
ATE inhalation (vapours mg/l)	29.3
Skin corrosion/irritation	
Animal data	Mildly to moderately irritating to skin. (rabbit)
Serious eye damage/irritation	
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 Not expected to impair fertility.

CELLULOSE SANDING SEALER CLEAR

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. Developmental toxicity: - NOAEC: 73300 mg/m³, Inhalation, Rat No teratogenic, maternal or developmental effects.

Specific target organ toxicity - single exposure

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

XYLENE

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	3,523.0
Species	Rat
ATE oral (mg/kg)	3,523.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	4,200.0
Species	Rabbit
ATE dermal (mg/kg)	1,100.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC_{50} gases ppmV)	6,700.0
Species	Rat
Acute toxicity inhalation (LC_{50} vapours mg/l)	27.6
Species	Rat
Acute toxicity inhalation (LC_{50} dust/mist mg/l)	10.0
Species	Rat
ATE inhalation (gases ppm)	6,700.0
ATE inhalation (vapours mg/l)	27.6
ATE inhalation (dusts/mists mg/l)	10.0

Skin corrosion/irritation

Animal data	Dose: 24 and, 72 hours, Rabbit Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation	Causes serious eye irritation.

CELLULOSE SANDING SEALER CLEAR

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.
IARC carcinogenicity	IARC Group 3 Not classifiable as to its carcinogenicity to humans.

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)

n-BUTYL ACETATE

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

CELLULOSE SANDING SEALER CLEAR

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

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.

PROPAN-2-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,001.0
Species	Rat
Notes (oral LD_{50})	Based on available data the classification criteria are not met.
ATE oral (mg/kg)	5,001.0

CELLULOSE SANDING SEALER CLEAR

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	5,001.0
Species	Rabbit
Notes (dermal LD_{50})	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	5,001.0

Acute toxicity - inhalation

Notes (inhalation LC_{50})	6 hours exposure Based on available data the classification criteria are not met.

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.

Specific target organ toxicity - single exposure

STOT - single exposure	Vapours may cause drowsiness and dizziness.
Target organs	Central nervous system Respiratory system, lungs

BUTAN-1-OL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	2,292.0
Species	Rat
ATE oral (mg/kg)	500.0

Acute toxicity - dermal

CELLULOSE SANDING SEALER CLEAR

Acute toxicity dermal (LD_{50} mg/kg)	3,430.0
Species	Rabbit
ATE dermal (mg/kg)	3,430.0

Skin corrosion/irritation

Animal data	Erythema/eschar score: Severe erythema (beef redness) to eschar formation preventing grading of erythema (4). (rabbit) Not fully reversible 8 days Oedema score: Slight oedema - edges of area well defined by definite raising (2). Not fully reversible 8 days Irritating to skin.

Serious eye damage/irritation

Serious eye damage/irritation	Corrosive eye irritant in rabbits with corneal damage - Category 1(Irreversible).

Respiratory sensitisation

Respiratory sensitisation	Not available.

Skin sensitisation

Skin sensitisation	Not expected to cause skin sensitisatiion.

Germ cell mutagenicity

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

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility	Two-generation study - NOAEL 18.5 mg/l, Inhalation, Rat P Two-generation study - NOAEL 18.5 mg/l, Inhalation, Rat F1
Reproductive toxicity - development	Teratogenicity: - NOAEL: 5654 mg/kg/day, Oral, Rat Maternal toxicity: - NOAEL: 1454 mg/kg/day, Oral, Rat Fetotoxicity: - NOAEL: 1454 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure	No information available.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	NOAEL 125 mg/kg, Oral, Rat

ETHANOL

Acute toxicity - oral

Acute toxicity oral (LD_{50} mg/kg)	5,000.0
Species	Rat
ATE oral (mg/kg)	5,000.0

Acute toxicity - dermal

Acute toxicity dermal (LD_{50} mg/kg)	6,400.0

CELLULOSE SANDING SEALER CLEAR

Species	Rabbit
ATE dermal (mg/kg)	6,400.0
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.

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 not classified as dangerous for the environment. Do not allow to enter drains or water courses.

12.1. Toxicity

CELLULOSE SANDING SEALER CLEAR

Toxicity There is no toxicity data for the mixture itself.

Ecological information on ingredients.

BUTANONE

Acute aquatic toxicity

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
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.

ETHYL ACETATE

Acute aquatic toxicity

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

XYLENE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 2.6 mg/l, Oncorhynchus 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

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOEC, 48 hours: 6.8 mg/l, Daphnia magna

n-BUTYL ACETATE

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 18 mg/l, Pimephales promelas (Fat-head Minnow) OECD Guideline for Testing of Chemicals, No.203

CELLULOSE SANDING SEALER CLEAR

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

PROPAN-2-OL

Acute aquatic toxicity

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

BUTAN-1-OL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 1376 mg/l, Pimephales promelas (Fat-head Minnow)
Acute toxicity - aquatic invertebrates	EC_{50}, 48 hours: 1328 mg/l, Daphnia magna
Acute toxicity - aquatic plants	EC_{50}, 96 hours: 225 mg/l, Selenastrum capricornutum
Acute toxicity - microorganisms	EC10, 17 hours: 2476 mg/l, Pseudomonas putida

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates	NOAEL, 21 days: 4.1 mg/l, Daphnia magna

ETHANOL

Acute aquatic toxicity

Acute toxicity - fish	LC_{50}, 96 hours: 15300 mg/l, Pimephales promelas (Fat-head Minnow) LC_{50}, 24 hours: 11200 mg/l, Oncorhynchus 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)

12.2. Persistence and degradability

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

Ecological information on ingredients.

CELLULOSE SANDING SEALER CLEAR

BUTANONE

Persistence and degradability The product is biodegradable.

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

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

XYLENE

Persistence and degradability Readily biodegradable

Biodegradation - Degradation % >60: 28 days
Readily biodegradable

n-BUTYL ACETATE

Persistence and degradability Readily biodegradable

Biodegradation Water - Degradation (%) 83: 28 days

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

BUTAN-1-OL

Persistence and degradability No data available.

Phototransformation - DT_{50} : 55.9 hours

Biodegradation Water - Degradation % 92%: 20 days
Readily biodegradable

CELLULOSE SANDING SEALER CLEAR

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

12.3. Bioaccumulative potential

Bioaccumulative potential	There is no data for the mixture itself.
Partition coefficient	Not relevant. : Product is a mixture. See Section 12 for partition coefficient data on individual components.

Ecological information on ingredients.

BUTANONE

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	log Pow: 0.3 @ 40°C

ETHYL ACETATE

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

XYLENE

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

n-BUTYL ACETATE

Bioaccumulative potential	The product is not bioaccumulating.
Partition coefficient	log Kow: 2.3 OECD Test Guideline 117

PROPAN-2-OL

Bioaccumulative potential	The product is not bioaccumulating.

BUTAN-1-OL

Bioaccumulative potential	Not expected to bioaccumulate. BCF: 3.16, Calculated data
Partition coefficient	log Pow: 1

ETHANOL

Bioaccumulative potential	Not expected to bioaccumulate.

12.4. Mobility in soil

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

Ecological information on ingredients.

CELLULOSE SANDING SEALER CLEAR

BUTANONE

Mobility	Expected to remain in water. Expected to migrate through soil. The product is soluble in water.
Surface tension	25 mN/m @ 20°C

ETHYL ACETATE

Mobility	The product is soluble in water.
Surface tension	24 mN/m @ 20°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

n-BUTYL ACETATE

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

PROPAN-2-OL

Mobility	The product is soluble in water.

BUTAN-1-OL

Mobility	No data available on mobility.
Adsorption/desorption coefficient	- log Koc: 0.388 @ °C
Surface tension	69.9 mN/m @ 20°C

ETHANOL

Mobility	Not expected to absorb on soil.
Henry's law constant	0.461 Pa m3/mol @ °C Read across data

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).

CELLULOSE SANDING SEALER CLEAR

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.

Additional information

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.

14.1. UN number

UN 1263

14.2. UN proper shipping name

PAINT

14.3. Transport hazard class(es)

3

ADR/RID class 3

ADR/RID label 3

Transport labels

14.4. Packing group

PG II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

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

CELLULOSE SANDING SEALER CLEAR

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"].

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

15.2. Chemical safety assessment

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

SECTION 16: Other information

CELLULOSE SANDING SEALER CLEAR

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: 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.

Legal obligations

CELLULOSE SANDING SEALER CLEAR

Revision comments	CLP 1.02 Safe use of mixture information added. NOTE: Lines within the margin indicate significant changes from the previous revision.
Issued by	Chief Chemist
Revision date	16/07/2018
Revision	CLP 1.02
Supersedes date	17/02/2016
SDS number	10353
Hazard statements in full	H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour. H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H332 Harmful if inhaled. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H373 May cause damage to organs through prolonged or repeated exposure.

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.

Manor Coating Systems Limited
Safe Use of Mixtures Report

Our SUMI Code: BBBEX
Version Number: 1.00
Issue Date: 16/07/2018

Purpose
This Safe Use of Mixtures Report has been compiled from information (including exposure scenarios) that we have received from our suppliers. We are obligated to pass information that is relevant to the safe use of our products (when they are used for their intended purpose and in line with our recommendations shown on our Product Data Sheet) down the supply chain. In general we manufacture mixtures and do not supply substances so we have reviewed the information provided to us and produced this Safe Use of Mixtures Report which should be read in conjunction with the relevant material safety Data Sheet and Product Data Sheet, best practice, process knowledge and guidance notes from the HSE and others when preparing risk assessments and designing safe systems of work. This information is passed down the chain as part of our obligations under REACH.

This report is prepared with our best reasonable endeavour using the information and knowledge in our possession at the date of publication.

SU3 Title	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15
SU3 Frequency and duration of use	Covers daily exposures up to 8 hours (unless stated)
SU3 Processes, tasks, activities covered	Covers the use in coatings/paints including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, spreader, dip, and film formation) and equipment cleaning, maintenance and associated laboratory activities.
SU3 Other Operational Conditions affecting worker exposure	If the technical/organisational control measures are not feasible, then adopt following PPE: Wear a full face respirator conforming to EN140 with Type A filter or better. Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Change filter cartridge on respirator daily.(Manual PROC7)
SU3 General exposures (closed systems)	Handle substance within a closed system.
SU3 Film formation - air drying	Use ventilation to extract vapours from freshly coated articles/objects.(PROC4)
SU3 Preparation of material for application. Mixing operations (open systems)	Provide a good standard of controlled ventilation (10 to 15 air changes per hour)
SU3 Spraying	Automatic/robotic: Carry out in a vented booth or extracted enclosure. Manual Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better. Use suitable eye protection and gloves tested to EN374.
SU3 Roller, spreader, flow application	Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings
SU3 Dipping, immersion and pouring	Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
SU3 Production of preparation or articles by tabletting, compression, extrusion or pelletisation	Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear suitable coveralls to prevent exposure to the skin.

SU22 Title	Uses in coatings - Professional
SU22 Process Category	PROC1, PROC2, PROC3, PROC4, PROC5, PROC7, PROC8a, PROC8b, PROC10, PROC13, PROC15
SU22 Processes, tasks, activities covered	Covers the use in coatings (paints, inks, adhesives, etc) within closed or contained systems including incidental exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application activities and film formation) and equipment cleaning, maintenance and associated laboratory activities. Butyl acetate concentration up to <25% for PROC5, PROC8a, PROC10, PROC13.
SU22 Frequency and duration of use	Frequency of use < 300 days/year Frequency of use > 4 days/week Exposure duration per day > 240 min(PROC1, PROC2) Exposure duration per day 60 - 240 min(PROC10, PROC11, PROC13) Exposure duration per day 15 - 60 min(PROC8a, PROC8b, PROC19)
SU22 Other Operational Conditions affecting worker exposure	If the technical/organisational control measures are not feasible, then adopt following PPE: Wear a respirator conforming to EN140 with Type A filter or better. Wear suitable gloves (tested to EN374) and eye protection.
SU22 Preparation of material for application	Handle substance within a closed system. Provide a good standard of controlled ventilation (10 to 15 air changes per hour).
SU22 Film formation - air drying	Indoor: Provide extract ventilation to points where emissions occur. Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour. Wear suitable gloves tested to EN374.
SU22 Preparation of material for application.	Indoor: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour. Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour.
SU22 Material transfers. Drum/batch transfers	Provide a good standard of general ventilation. Natural ventilation is from windows and doors etc. Controlled ventilation means air is supplied or removed by a powered fan. Avoid carrying out operation for more than 1 hour, or: Wear a respirator conforming to EN140 with Type A filter or better Ensure transfer points are supplied with extract ventilation
SU22 Brush, Roller, spreader, flow application	Indoor. Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with Type A/P2 filter or better. Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better.
SU22 Spraying. Manual	Indoor: Carry out in a vented booth or extracted enclosure. Outdoor: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 4 hours. Wear suitable gloves tested to EN374.Wear a respirator conforming to EN140 with Type A/P2 filter or better. Wear suitable eye protection.
SU22 Dipping, immersion and pouring.	Indoor. Provide extract ventilation to points where emissions occur. Avoid carrying out activities involving exposure for more than 4 hours Outdoor. Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with Type A/P2 filter or better. Wear suitable eye protection

Sectors of Use (SU) and Process Codes (PROC)
Sectors of Use (SU) and Process Codes (PROC) are defined in various regulations.

For the paint industry
SU 3 - Industrial Use of Coatings (eg within a factory on a production line)
SU22 - Use of Coatings by Professional Users (eg a painter and decorator)
Are the most relevant

Method of Preparation
In preparing this Safe Use of Mixtures Report we have relied heavily on the LCID. Specifically contained in Safe Use Information for Mixtures under REACH and the Lead Component (LCID) Methodology - A Brief Description (March 2016) published by CEFIC and their supporting spreadsheets published in 2017.

This approach has been endoursed by the European paint association (CEPE) and the British Coatings Federation (BCF).

The CEFIC approach uses information published by suppliers and in generally available sources including DNELs and PNECs and ECETOC-TRA data.

Further advice, support or assistance
If you require further advice, information, support or assistance please contact us.

Lead Component Identifcation (LCID) information

LC INHALATION	BUTANONE
LC DERMAL	BUTYL ACETATE
EYE HAZ 1	BUTANONE
EYE HAZ 2	Ethyl Acetate
EYE HAZ 3	XYLENE