

# SAFETY DATA SHEET



TEKNOCOAT 1677-04

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

### 1.1 Product identifier

Product name : TEKNOCOAT 1677-04

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

Product use : Paint.

### 1.3 Details of the supplier of the safety data sheet

Teknos Group Oy, Takkatie 3, FI-00370 HELSINKI, FINLAND. Tel. +358 9 506 091.

e-mail address of person responsible for this SDS : Prod-safe@teknos.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Centre

Telephone number : Emergency medical information: (seven days) contact National Poisons Information Centre, Beaumont Hospital, Dublin 9 DOV2NO, Ireland.  
Members of the public Number (8 am-10 pm): +353 (0)1 809 2166  
Healthcare professional telephone Number (24hrs): +353 (0)1 809 2566

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Product definition : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226  
Eye Dam. 1, H318  
STOT SE 3, H336

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H226 - Flammable liquid and vapour.  
H318 - Causes serious eye damage.  
H336 - May cause drowsiness or dizziness.

#### Precautionary statements

Prevention : P280 - Wear eye or face protection.  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response : P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

## SECTION 2: Hazards identification

- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : Contains: n-Butyl acetate and Butan-1-ol
- Supplemental label elements** : Contains Formaldehyde. May produce an allergic reaction.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** :

### 2.3 Other hazards

- Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
- Other hazards which do not result in classification** : None known.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
n-Butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	-	[1] [2]
Urea-formaldehyde-polymer	CAS: 68002-18-6	≤10	Aquatic Chronic 4, H413	-	[1]
Urea, polymer with formaldehyde, butylated	CAS: 68002-19-7	≤10	Aquatic Chronic 4, H413	-	[1]
Butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≤5	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	ATE [Oral] = 790 mg/kg	[1] [2]
Ethanol	REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5 Index: 603-002-00-5	≤3	Flam. Liq. 2, H225 Eye Irrit. 2, H319	-	[1] [2]
Formaldehyde	REACH #: 01-2119488953-20 EC: 200-001-8 CAS: 50-00-0 Index: 605-001-00-5	<0.1	Acute Tox. 4, H302 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Muta. 2, H341 Carc. 1B, H350 STOT SE 3, H335 EUH071	ATE [Oral] = 500 mg/kg ATE [Inhalation (gases)] = 100 ppm Skin Corr. 1B, H314: C ≥ 25% Skin Irrit. 2, H315: 5% ≤ C < 25% Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 5% ≤ C < 25%	[1] [2]

## SECTION 3: Composition/information on ingredients

				STOT SE 3, H335: C ≥ 5%	
--	--	--	--	----------------------------	--

### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

**See Section 16 for the full text of the H statements declared above.**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness

## SECTION 4: First aid measures

- Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

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

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Hazards from the substance or mixture** : Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
- Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides  
metal oxide/oxides

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** :  No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## SECTION 6: Accidental release measures

**6.2 Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

**Small spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

**Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. See Section 10 for incompatible materials before handling or use.

#### Seveso Directive - Reporting thresholds

##### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonnes	50000 tonnes

### 7.3 Specific end use(s)

**Recommendations** : Not available.

## SECTION 7: Handling and storage

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
n-Butyl acetate	<b>NAOSH (Ireland, 4/2024)</b> Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 50 ppm. OELV 8 hours: 241 mg/m <sup>3</sup> . OELV 15 minutes: 150 ppm. OELV 15 minutes: 723 mg/m <sup>3</sup> .
Butan-1-ol	<b>NAOSH (Ireland, 4/2024)</b> Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV 8 hours: 20 ppm.
Ethanol	<b>NAOSH (Ireland, 4/2024)</b> Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV 15 minutes: 1000 ppm.
Formaldehyde	<b>NAOSH (Ireland, 4/2024)</b> Carc 1B. Sensitiser. Notes: EU derived Occupational Exposure Limit Values OELV 8 hours: 0.3 ppm. OELV 15 minutes: 0.6 ppm. OELV 15 minutes: 0.738 mg/m <sup>3</sup> . OELV 8 hours: 0.37 mg/m <sup>3</sup> .

#### Biological exposure indices

Product/ingredient name	Exposure indices
No exposure indices known.	

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### DNELs/DMELs

##### **Product/ingredient name**

n-Butyl acetate

##### **Result**

**DNEL - General population - Long term - Oral**

2 mg/kg bw/day

Effects: Systemic

**DNEL - General population - Short term - Oral**

2 mg/kg bw/day

Effects: Systemic

**DNEL - General population - Long term - Dermal**

3.4 mg/kg bw/day

Effects: Systemic

**DNEL - General population - Short term - Dermal**

6 mg/kg bw/day

Effects: Systemic

## SECTION 8: Exposure controls/personal protection

### **DNEL - Workers - Long term - Dermal**

7 mg/kg bw/day

Effects: Systemic

### **DNEL - Workers - Short term - Dermal**

11 mg/kg bw/day

Effects: Systemic

### **DNEL - General population - Long term - Inhalation**

12 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - General population - Long term - Inhalation**

35.7 mg/m<sup>3</sup>

Effects: Local

### **DNEL - Workers - Long term - Inhalation**

48 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - General population - Short term - Inhalation**

300 mg/m<sup>3</sup>

Effects: Local

### **DNEL - General population - Short term - Inhalation**

300 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - Workers - Long term - Inhalation**

300 mg/m<sup>3</sup>

Effects: Local

### **DNEL - Workers - Short term - Inhalation**

600 mg/m<sup>3</sup>

Effects: Local

### **DNEL - Workers - Short term - Inhalation**

600 mg/m<sup>3</sup>

Effects: Systemic

Butan-1-ol

### **DNEL - General population - Long term - Oral**

1.5625 mg/kg bw/day

Effects: Systemic

### **DNEL - General population - Long term - Dermal**

3.125 mg/kg bw/day

Effects: Systemic

### **DNEL - General population - Long term - Inhalation**

55.357 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - General population - Long term - Inhalation**

155 mg/m<sup>3</sup>

Effects: Local

### **DNEL - Workers - Long term - Inhalation**

310 mg/m<sup>3</sup>

Effects: Local

Ethanol

### **DNEL - Workers - Long term - Inhalation**

380 mg/m<sup>3</sup>

Effects: Systemic

### **DNEL - General population - Long term - Oral**

87 mg/kg bw/day

## SECTION 8: Exposure controls/personal protection

Effects: Systemic

**DNEL - General population - Long term - Inhalation**

114 mg/m<sup>3</sup>

Effects: Systemic

**DNEL - General population - Long term - Dermal**

206 mg/kg bw/day

Effects: Systemic

**DNEL - Workers - Long term - Dermal**

343 mg/kg bw/day

Effects: Systemic

**DNEL - General population - Short term - Inhalation**

950 mg/m<sup>3</sup>

Effects: Local

**DNEL - Workers - Short term - Inhalation**

1900 mg/m<sup>3</sup>

Effects: Local

Formaldehyde

**DNEL - General population - Long term - Dermal**

12 µg/cm<sup>2</sup>

Effects: Local

**DNEL - Workers - Long term - Dermal**

37 µg/cm<sup>2</sup>

Effects: Local

**DNEL - General population - Long term - Inhalation**

0.1 mg/m<sup>3</sup>

Effects: Local

**DNEL - Workers - Long term - Inhalation**

0.375 mg/m<sup>3</sup>

Effects: Local

**DNEL - Workers - Short term - Inhalation**

0.75 mg/m<sup>3</sup>

Effects: Local

**DNEL - General population - Long term - Inhalation**

3.2 mg/m<sup>3</sup>

Effects: Systemic

**DNEL - General population - Long term - Oral**

4.1 mg/kg bw/day

Effects: Systemic

**DNEL - Workers - Long term - Inhalation**

9 mg/m<sup>3</sup>

Effects: Systemic

**DNEL - General population - Long term - Dermal**

102 mg/kg bw/day

Effects: Systemic

**DNEL - Workers - Long term - Dermal**

240 mg/kg bw/day

Effects: Systemic

### PNECs

Not available.

## SECTION 8: Exposure controls/personal protection

### 8.2 Exposure controls

**Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

#### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### Skin protection

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Filter type: A

Filter type (spray application): A P

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

#### Appearance

**Physical state** : Liquid.  
**Colour** : Various  
**Odour** : Slight  
**Odour threshold** : Not available.

## SECTION 9: Physical and chemical properties

**Melting point/freezing point** : Not available.

**Initial boiling point and boiling range** :

Ingredient name	°C	°F	Method
Ethanol	78.29	172.9	
Butan-1-ol	119	246.2	OECD 103

**Flammability** : Not available.

**Lower and upper explosion limit** : Lower: 1.4% (n-butyl acetate)  
Upper: 19% (ethanol)

**Flash point** : Closed cup: 27°C (80.6°F)

**Auto-ignition temperature** :

Ingredient name	°C	°F	Method
Butan-1-ol	355	671	EU A.15
n-Butyl acetate	415	779	EU A.15

**Decomposition temperature** : Not available.

**pH** : Not available.

**Viscosity** : Not available.

**Solubility(ies)** :

Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/ water** : Not applicable.

**Vapour pressure** :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
Ethanol	42.94865	5.7				
n-Butyl acetate	11.25096	1.5	DIN EN 13016-2			

**Relative density** : Not available.

**Density** : 1 g/cm<sup>3</sup>

**Vapour density** : Not available.

### Particle characteristics

**Median particle size** : Not applicable.

## 9.2 Other information

### 9.2.1 Information with regard to physical hazard classes

**Explosive properties** : Not available.

**Oxidising properties** : Not available.

### 9.2.2 Other safety characteristics

Not applicable.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.

**10.2 Chemical stability** : The product is stable.

**10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## SECTION 10: Stability and reactivity

- 10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
- 10.5 Incompatible materials** : Reactive or incompatible with the following materials:  
oxidising materials
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

##### Product/ingredient name

n-Butyl acetate

##### Result

###### Rat - Oral - LD50

10760 mg/kg

EU

###### Rabbit - Dermal - LD50

14112 mg/kg

###### Rat - Inhalation - LC50 Vapour

0.74 mg/l [4 hours]

Urea-formaldehyde-polymer

###### Rat - Oral - LD50

>5 g/kg

Toxic effects: Olfaction - Other changes Behavioral - Somnolence (general depressed activity) Behavioral - Food intake (animal)

###### Rabbit - Dermal - LD50

>5 g/kg

Toxic effects: Skin After systemic exposure - Dermatitis, other

Butan-1-ol

###### Rat - Oral - LD50

790 mg/kg

Toxic effects: Liver - Fatty liver degeneration Kidney, Ureter, and Bladder - Other changes Blood - Other changes

###### Rabbit - Dermal - LD50

3400 mg/kg

###### Rat - Inhalation - LC50 Vapour

24000 mg/m<sup>3</sup> [4 hours]

Ethanol

###### Rat - Oral - LD50

7 g/kg

###### Rat - Inhalation - LC50 Vapour

124700 mg/m<sup>3</sup> [4 hours]

Formaldehyde

###### Rat - Oral - LD50

100 mg/kg

###### Rabbit - Dermal - LD50

270 mg/kg

###### Rat - Inhalation - LC50 Gas.

250 ppm [4 hours]

**Conclusion/Summary [Product]** : Not available.

#### Acute toxicity estimates

**Date of issue/Date of revision**

: 11/06/2026

**Date of previous issue**

: 27/01/2026

**Version** : 1.02 11/22

EKNOCOAT 1677-04

**Label No** : 42051

## SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
EKNOCOAT 1677-04	16218.8	N/A	N/A	N/A	N/A
n-Butyl acetate	10760	14112	N/A	N/A	N/A
Butan-1-ol	790	3400	N/A	24	N/A
Ethanol	7000	N/A	N/A	124.7	N/A
Formaldehyde	500	N/A	100	N/A	N/A

### Skin corrosion/irritation

#### Product/ingredient name

n-Butyl acetate

#### Result

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours  
Amount/concentration applied: 500 mg

Butan-1-ol

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours  
Amount/concentration applied: 20 mg

Ethanol

**Rabbit - Skin - Mild irritant**

Amount/concentration applied: 400 mg

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours  
Amount/concentration applied: 20 mg

Formaldehyde

**Human - Skin - Mild irritant**

Duration of treatment/exposure: 72 hours  
Amount/concentration applied: 150 ug l

**Human - Skin - Severe irritant**

Amount/concentration applied: 0.01 %

**Rabbit - Skin - Mild irritant**

Amount/concentration applied: 540 mg

**Rabbit - Skin - Moderate irritant**

Duration of treatment/exposure: 24 hours  
Amount/concentration applied: 50 mg

**Rabbit - Skin - Severe irritant**

Duration of treatment/exposure: 24 hours  
Amount/concentration applied: 2 mg

**Rabbit - Skin - Severe irritant**

Amount/concentration applied: 0.8 %

**Mouse - Skin - Moderate irritant**

Amount/concentration applied: 7 %

**Rat - Skin - Moderate irritant**

Amount/concentration applied: 7 %

**Rabbit - Skin - Severe irritant**

Duration of treatment/exposure: 72 hours  
Amount/concentration applied: 0.8 %

**Conclusion/Summary [Product]** : Not available.

### Serious eye damage/eye irritation

#### Product/ingredient name

#### Result

Date of issue/Date of revision

: 11/06/2026

Date of previous issue

: 27/01/2026

Version : 1.02 12/22

EKNOCOAT 1677-04

Label No : 42051

## SECTION 11: Toxicological information

n-Butyl acetate

**Rabbit - Eyes - Moderate irritant**

Amount/concentration applied: 100 mg

Urea-formaldehyde-polymer

**Rabbit - Eyes - Severe irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 100 uL

Butan-1-ol

**Rabbit - Eyes - Severe irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 2 mg

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 0.005 MI

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 1.62 mg

Ethanol

**Rabbit - Eyes - Mild irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 500 mg

**Rabbit - Eyes - Moderate irritant**

Duration of treatment/exposure: 0.066666667 minutes

Amount/concentration applied: 100 mg

**Rabbit - Eyes - Moderate irritant**

Amount/concentration applied: 100 uL

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 500 mg

**Rabbit - Eyes - Mild irritant**

Duration of treatment/exposure: 1 hours

Amount/concentration applied: 50 pph

Formaldehyde

**Human - Eyes - Mild irritant**

Duration of treatment/exposure: 6 minutes

Amount/concentration applied: 1 ppm

**Rabbit - Eyes - Severe irritant**

Duration of treatment/exposure: 24 hours

Amount/concentration applied: 750 ug

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 750 ug

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 37 %

**Rabbit - Eyes - Severe irritant**

Amount/concentration applied: 10 mg

**Mouse - Eyes - Moderate irritant**

Amount/concentration applied: 3 %

**Conclusion/Summary [Product]** : Not available.

### Respiratory corrosion/irritation

Not available.

**Conclusion/Summary [Product]** : Not available.

### Respiratory or skin sensitization

*Date of issue*/*Date of revision*

: 11/06/2026

*Date of previous issue*

: 27/01/2026

*Version* : 1.02 13/22

EKNOCOAT 1677-04

**Label No** : 42051

## SECTION 11: Toxicological information

Not available.

### Skin

**Conclusion/Summary [Product]** : Not available.

### Respiratory

**Conclusion/Summary [Product]** : Not available.

### Germ cell mutagenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Carcinogenicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Reproductive toxicity

Not available.

**Conclusion/Summary [Product]** : Not available.

### Specific target organ toxicity (single exposure)

#### Product/ingredient name

n-Butyl acetate  
Butan-1-ol

Formaldehyde

#### Result

STOT SE 3, H336 (Narcotic effects)  
STOT SE 3, H335 (Respiratory tract irritation)  
STOT SE 3, H336 (Narcotic effects)  
STOT SE 3, H335 (Respiratory tract irritation)

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on likely routes of exposure

Not available.

### Potential acute health effects

- Eye contact** : Causes serious eye damage.  
**Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : Can cause central nervous system (CNS) depression.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness  
**Inhalation** : Adverse symptoms may include the following:  
nausea or vomiting  
headache  
drowsiness/fatigue  
dizziness/vertigo  
unconsciousness

## SECTION 11: Toxicological information

**Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur

**Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

**Conclusion/Summary [Product]** : Not available.

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Reproductive toxicity** : No known significant effects or critical hazards.

### 11.2 Information on other hazards

#### 11.2.1 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

#### 11.2.2 Other information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Product/ingredient name

n-Butyl acetate

#### Result

##### Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*  
Age: 31 to 32 days; Size: 21.6 mm; Weight: 0.175 g  
18000 µg/l [96 hours]  
Effect: Mortality

##### Acute - LC50 - Marine water

Crustaceans - Brine shrimp - *Artemia salina*  
32 mg/l [48 hours]  
Effect: Mortality

Butan-1-ol

##### Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*  
Age: 33 days; Size: 20.6 mm; Weight: 0.119 g  
1730000 µg/l [96 hours]  
Effect: Mortality

##### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna*  
Age: 6 to 24 hours  
1983000 µg/l [48 hours]  
Effect: Intoxication

## SECTION 12: Ecological information

Ethanol

### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia magna*

2000 µg/l [48 hours]

Effect: Physiology

### Acute - LC50 - Fresh water

Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*

42000 µg/l [4 days]

Effect: Mortality

### Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*

17.921 mg/l [96 hours]

Effect: Reproduction

### Chronic - NOEC - Marine water

Algae - Green algae - *Ulva pertusa*

4.995 mg/l [96 hours]

Effect: Reproduction

### Chronic - NOEC - Fresh water

Fish - Eastern mosquitofish - *Gambusia holbrooki* - Larvae

Age: 3 days

0.375 µl/l [12 weeks]

Effect: Morphology

### Chronic - NOEC - Fresh water

Daphnia - Water flea - *Daphnia magna* - Neonate

Age: <24 hours

100 µl/l [21 days]

Effect: Mortality

Formaldehyde

### Acute - EC50 - Fresh water

Daphnia - Water flea - *Daphnia pulex* - Neonate

Age: <24 hours

5800 µg/l [48 hours]

Effect: Intoxication

### Acute - EC50 - Marine water

Algae - Green algae - *Ulva pertusa*

0.788 mg/l [96 hours]

Effect: Reproduction

### Acute - LC50 - Fresh water

US EPA

Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*

1.41 ppm [96 hours]

Effect: Mortality

### Chronic - NOEC - Fresh water

Fish - Chinook salmon - *Oncorhynchus tshawytscha* - Egg

953.9 ppm [43 days]

Effect: Mortality

### Chronic - NOEC - Marine water

Algae - Haptophyte - *Isochrysis galbana* - Exponential growth phase

Age: 4 to 5 days

0.005 mg/l [96 hours]

Effect: Population

**Conclusion/Summary [Product]** : Not available.

### 12.2 Persistence and degradability

Not available.

## SECTION 12: Ecological information

**Conclusion/Summary [Product]** : Not available.

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<input checked="" type="checkbox"/> n-Butyl acetate	2.3	-	Low
Butan-1-ol	1	-	Low
Ethanol	-0.35	-	Low
Formaldehyde	0.35	-	Low

### 12.4 Mobility in soil

#### Soil/water partition coefficient

Product/ingredient name	Value
<input checked="" type="checkbox"/> n-Butyl acetate	logKoc: 1.5 Koc: 33.2139
Butan-1-ol	logKoc: 0.51 Koc: 3.22078
Ethanol	logKoc: 0.2 Koc: 1.59008
Formaldehyde	logKoc: 0.44 Koc: 2.72646

#### Results of PMT and vPvM assessment

Product/ingredient name	PMT	P	M	T	vPvM	vP	vM
n-Butyl acetate	No	No	No	No	No	No	No
Urea-formaldehyde-polymer	No	No	No	No	No	No	No
Urea, polymer with formaldehyde, butylated	No	No	No	No	No	No	No
Butan-1-ol	No	No	No	No	No	No	No
Ethanol	No	No	No	No	No	No	No
Formaldehyde	No	No	No	No	No	No	No

**Mobility** : Not available.

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PMT or vPvM.

### 12.5 Results of PBT and vPvB assessment

#### Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-Butyl acetate	No	N/A	N/A	No	N/A	N/A	N/A
Urea-formaldehyde-polymer	No	N/A	N/A	No	N/A	N/A	N/A
Urea, polymer with formaldehyde, butylated	No	N/A	N/A	No	N/A	N/A	N/A
Butan-1-ol	No	N/A	N/A	No	N/A	N/A	N/A
Ethanol	No	N/A	N/A	No	N/A	N/A	N/A
Formaldehyde	N/A	N/A	N/A	Yes	N/A	N/A	N/A

#### Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
n-Butyl acetate	No	No	No	No	No	No	No
Urea-formaldehyde-polymer	No	No	No	No	No	No	No
Urea, polymer with formaldehyde, butylated	No	No	No	No	No	No	No
Butan-1-ol	No	No	No	No	No	No	No
Ethanol	No	No	No	No	No	No	No
Formaldehyde	No	No	No	No	No	No	No

**Conclusion/Summary** : The product does not meet the criteria to be considered as a PBT or vPvB.

**Regulation (EC) No. 1272/2008 [CLP]**

## SECTION 12: Ecological information

### 12.6 Endocrine disrupting properties

Not available.

**Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.


### 12.7 Other adverse effects

No known significant effects or critical hazards.


## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** :  Dispose of contents and container in accordance with all local, regional, national and international regulations. Avoid release to the environment. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.





**European waste catalogue (EWC)** :  08 01 11

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINT	PAINT	PAINT
14.3 Transport hazard class(es)	3 	3 	3 	3 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	Yes.	No.	No.

#### Additional information

**ADR/RID** : **Tunnel code** (D/E)

**ADN** : The product is only regulated as an environmentally hazardous substance when transported in tank vessels.

**14.6 Special precautions for user** : **Transport within 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 an accident or spillage.

**Date of issue/Date of revision** : 11/06/2026

**Date of previous issue** :

27/01/2026

**Version** : 1.02 18/22

 EKNOCOAT 1677-04

**Label No** :  42051

## SECTION 14: Transport information

**14.7 Maritime transport in bulk according to IMO instruments** : Not relevant/applicable due to nature of the product.

## SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

**Annex XIV - List of substances subject to authorisation**

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Product/ingredient name	%	Designation [Usage]
TEKNOCOAT 1677-04	≥90	3
Formaldehyde	<0.1	72

**Labelling**

**Synthetic polymer microparticles - Designation 78**

**Generic identity of polymer(s)** : 3910 - Silicones.

**Total percentage of synthetic polymer microparticles** : 0.2%

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

**Other EU regulations**

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**Explosive precursors** : Not applicable.

**(EC) No 273/2004 on drug precursors**

Not listed.

**(EC) No 111/2005 Trade between the Union and third countries in drug precursors**

Ingredient name	%	Status
Toluene and its salts	≤0.0015	Category 3

**Ozone depleting substances (EU 2024/590)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Persistent Organic Pollutants**

Not listed.

**Seveso Directive**

This product is controlled under the Seveso Directive.

## SECTION 15: Regulatory information

### Danger criteria

#### Category

P5c

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### 15.2 Chemical safety assessment

: This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

### Abbreviations and acronyms

: ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
N/A = Not available  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
SGG = Segregation Group  
vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
✔ Flam. Liq. 3, H226 Eye Dam. 1, H318 STOT SE 3, H336	On basis of test data Calculation method Calculation method

### Full text of abbreviated H statements

✔ H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH071	Corrosive to the respiratory tract.

## SECTION 16: Other information

### [Full text of classifications \[CLP/GHS\]](#)

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 4	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 4
Carc. 1B	CARCINOGENICITY - Category 1B
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Muta. 2	GERM CELL MUTAGENICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

**Date of issue/ Date of revision** : 11/06/2026

**Date of previous issue** : 27/01/2026

**Version** : 1.02

TEKNOCOAT 1677-04

All variants

### [Notice to reader](#)

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

