

# Hranicoll D4

Issue date: 1/13/2018

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

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

### 1.1. Product identifier

Product form : Mixture  
Product name : Hranicoll D4

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

#### 1.2.1. Relevant identified uses

Main use category : Professional use  
Use of the substance/mixture : adhesives  
Function or use category : Adhesives, binding agents

#### 1.2.2. Uses advised against

No additional information available

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

#### Distributor

Hranipex Czech Republic k.s.  
J. Rýznerové 97, Komorovice  
CZ 396 01 Humpolec  
Czech Republic  
T +420 565 501 211

[cz-hranipex@hranipex.com](mailto:cz-hranipex@hranipex.com), [www.hranipex.cz](http://www.hranipex.cz)

E-mail address of competent person responsible for the SDS :

[sds@regartis.com](mailto:sds@regartis.com)

#### Supplier

Hranipex Ltd.  
Unit 2 Radial Park, Birmingham Business Park  
Birmingham, B37 7YN  
United Kingdom  
T +44 121 767 9180, F 0121 782 6250  
[uk-hranipex@hranipex.com](mailto:uk-hranipex@hranipex.com), [www.hranipex.co.uk](http://www.hranipex.co.uk)

### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
United Kingdom	National Poisons Information Service (Birmingham Centre) City Hospital	Dudley Road B18 7QH	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Edinburgh Centre) Royal Infirmary of Edinburgh	Little France Crescent EH16 4SA	0344 892 0111	Only for healthcare professionals
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Newcastle Centre) Regional Drugs and Therapeutics Centre	16/17 Framlington Place Newcastle-upon-Tyne NE2 4AB	0344 892 0111	Only for healthcare professionals
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Not classified

# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

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

EUH-statements : EUH208 - Contains formaldehyde ...%(50-00-0). May produce an allergic reaction.  
 EUH210 - Safety data sheet available on request.

## 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aluminum chloride, basic	CAS-No.: 1327-41-9 EC-No.: 215-477-2 REACH-no: 01-2119531563-43-XXXX	1 – 5	Met. Corr. 1, H290 Eye Dam. 1, H318
Propylene carbonate	CAS-No.: 108-32-7 EC-No.: 203-572-1 EC Index-No.: 607-194-00-1 REACH-no: 01-2119537232-48-XXXX	1 – 5	Eye Irrit. 2, H319
formaldehyde ...%	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20-XXXX	0.01 – 0.1	Carc. 1B, H350 Muta. 2, H341 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Skin Corr. 1B, H314 Skin Sens. 1, H317

### Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
formaldehyde ...%	CAS-No.: 50-00-0 EC-No.: 200-001-8 EC Index-No.: 605-001-00-5 REACH-no: 01-2119488953-20-XXXX	(0.2 ≤ C < 100) Skin Sens. 1, H317 (5 ≤ C < 100) STOT SE 3, H335 (5 ≤ C < 25) Eye Irrit. 2, H319 (5 ≤ C < 25) Skin Irrit. 2, H315 (25 ≤ C < 100) Skin Corr. 1B, H314

Full text of H- and EUH-statements: see section 16

# Hranicoll D4

Issue date: 1/13/2018

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Remove victim to uncontaminated area. Consult a doctor/medical service if you feel unwell. If possible show this sheet, if not available show packaging or label. Do not leave affected person unattended.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Wash skin with plenty of water and soap. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do NOT induce vomiting. Call a physician immediately.

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

No additional information available

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Carbon dioxide. Foam. Dry powder. Water fog.
Unsuitable extinguishing media	: Strong water jet.

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

Hazardous decomposition products in case of fire	: Carbon oxides (CO and CO <sub>2</sub> ). Other toxic gases. Exposure to combustion or decomposition products can be harmful to your health.
--	---

### 5.3. Advice for firefighters

Protection during firefighting	: Use a self-contained breathing apparatus and also a protective suit. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Prevent fire fighting water from entering the environment.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not touch or walk on the spilled product. Stop leaks if it can be done without personal risk.

#### 6.1.2. For emergency responders

Protective equipment	: Do not enter without an appropriate protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
----------------------	--

### 6.2. Environmental precautions

Do not allow the mixture to enter into sewer, water system (underground water, surface water) or soil.

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

Methods for cleaning up	: Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Collect all waste in suitable and labelled containers and dispose according to local legislation. Clear contaminated areas thoroughly.
-------------------------	---

# Hranicoll D4

Issue date: 1/13/2018

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024 Supersedes version of: 8/22/2023

Version: 4.3

## 6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Carefully handle the substance to minimise releases. Keep container closed when not in use. Keep away from food and drink. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

- Storage conditions : Store in dry, well-ventilated area. Keep in properly labelled containers. . Keep out of frost. Opened containers must be carefully closed and kept upright to avoid leakage.
- Storage temperature : 5 – 25 °C
- Information on mixed storage : Storage class 12.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1 National occupational exposure and biological limit values

formaldehyde ...% (50-00-0)	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	Formaldehyde
IOEL TWA	0.2 ppm
IOEL STEL	0.4 ppm
Remark	skin sensitiser. SCOEL Recommendations (2008/Ongoing)
<b>EU - Binding Occupational Exposure Limit (BOEL)</b>	
Local name	Formaldehyde
BOEL TWA	0.62 mg/m <sup>3</sup> (Limit value for the health care, funeral and embalming sectors until 11 July 2024) 0.37 mg/m <sup>3</sup> 0.3 ppm 0.5 ppm (Limit value for the health care, funeral and embalming sectors until 11 July 2024)
BOEL STEL	0.74 mg/m <sup>3</sup> 0.6 ppm
Notes	Dermal sensitisation (The substance can cause sensitisation of the skin)
Regulatory reference	DIRECTIVE (EU) 2019/983 (amending Directive 2004/37/EC)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Formaldehyde
WEL TWA (OEL TWA)	2.5 mg/m <sup>3</sup> 2 ppm

## Hranicoll D4

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024 Supersedes version of: 8/22/2023

Issue date: 1/13/2018

Version: 4.3

**formaldehyde ...% (50-00-0)**

WEL STEL (OEL STEL)	2.5 mg/m <sup>3</sup>
	2 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

**8.1.2. Recommended monitoring procedures**

No additional information available

**8.1.3. Air contaminants formed**

No additional information available

**8.1.4. DNEL and PNEC****Aluminum chloride, basic (1327-41-9)****DNEL/DMEL (Workers)**

Acute - systemic effects, dermal 5.7 mg/kg bodyweight/day

**DNEL/DMEL (General population)**

Acute - systemic effects, oral 3.7 mg/kg bodyweight

Long-term - systemic effects, oral 0.3 mg/kg bodyweight/day

**PNEC (Water)**

PNEC aqua (freshwater) 0.3 µg/L

**Propylene carbonate (108-32-7)****DNEL/DMEL (Workers)**Acute - local effects, inhalation 20 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 50 mg/kg bodyweight/day

**DNEL/DMEL (General population)**Acute - systemic effects, inhalation 176 mg/m<sup>3</sup>

Long-term - systemic effects, oral 25 mg/kg bodyweight/day

Long-term - systemic effects, inhalation 43.5 mg/m<sup>3</sup>

Long-term - systemic effects, dermal 25 mg/kg bodyweight/day

Long-term - local effects, inhalation 10 mg/m<sup>3</sup>**PNEC (Water)**

PNEC aqua (freshwater) 0.9 mg/l

PNEC aqua (marine water) 0.09 mg/l

PNEC aqua (intermittent, freshwater) 9 mg/l

**PNEC (Soil)**

PNEC soil 0.81 mg/kg dwt

**PNEC (STP)**

PNEC sewage treatment plant 7400 mg/l

**formaldehyde ...% (50-00-0)****DNEL/DMEL (Workers)**

Acute - local effects, inhalation 0.8 mg/kg bw/day

Long-term - systemic effects, dermal 240 mg/kg bodyweight/day

Long-term - local effects, dermal 0.037 mg/cm<sup>2</sup>

# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

<b>formaldehyde ...% (50-00-0)</b>	
Long-term - systemic effects, inhalation	9 mg/m <sup>3</sup>
Long-term - local effects, inhalation	0.4 mg/kg bw/day
<b>DNEL/DMEL (General population)</b>	
Long-term - systemic effects, oral	4.1 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	3.2 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	102 mg/kg bodyweight/day
Long-term - local effects, dermal	0.012 mg/cm <sup>2</sup>
Long-term - local effects, inhalation	0.1 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0.47 mg/l
PNEC aqua (marine water)	0.47 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	2.44 mg/kg dwt
PNEC sediment (marine water)	2.44 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0.21 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	0.19 mg/l

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Provide local exhaust or general room ventilation. A first aid kit with appropriate content must be available.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Wear proper protective equipment.

#### 8.2.2.1. Eye and face protection

##### Eye protection:

tightly fitting safety goggles

#### 8.2.2.2. Skin protection

##### Skin and body protection:

Long sleeved protective clothing. Safety footwear

##### Hand protection:

Nitrile-rubber protective gloves. Standard EN 374 - Protective gloves against chemicals. Unsuitable materials. leather gloves

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

In case of inadequate ventilation wear respiratory protection.

#### 8.2.2.4. Thermal hazards

No additional information available

# Hranicoll D4

Issue date: 1/13/2018

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## 8.2.3. Environmental exposure controls

### Environmental exposure controls:

Avoid release to the environment.

### Other information:

Wash protective equipment and clothing before reuse. Do not eat, drink or smoke in areas where product is used. Always wash your hands immediately after handling this product, and once again before leaving the workplace.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: White.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: $\approx 0$ °C
Boiling point	: $\approx 100$ °C
Flammability	: Not applicable
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: $> 100$ °C ISO 13736 / IP170
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: 2.6 – 3.2
Viscosity, kinematic	: 54.2 mm <sup>2</sup> /s
Viscosity, dynamic	: 3500 – 8000 mPa·s
Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 23 hPa
Vapour pressure at 50°C	: Not available
Density	: 1.02 – 1.1 g/cm <sup>3</sup>
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Extremely high or low temperatures. Keep out of frost.

# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## 10.5. Incompatible materials

No additional information available

## 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 (oral) : Not classified (Based on available data, the classification criteria are not met)  
 Acute toxicity (dermal) : Not classified (Based on available data, the classification criteria are not met)  
 Acute toxicity (inhalation) : Not classified (Based on available data, the classification criteria are not met)

#### Aluminum chloride, basic (1327-41-9)

LD50 oral rat	> 2001 mg/kg
---------------	--------------

LD50 dermal rat	> 2001 mg/kg
-----------------	--------------

#### Propylene carbonate (108-32-7)

LD50 oral rat	33520 mg/kg
---------------	-------------

LD50 dermal rabbit	≥ 2001 mg/kg
--------------------	--------------

#### formaldehyde ...% (50-00-0)

LD50 oral rat	100 mg/kg
---------------	-----------

LD50 dermal rabbit	270 mg/kg
--------------------	-----------

Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met)  
 pH: 2.6 – 3.2

Additional information : (OECD 439 method)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met).  
 pH: 2.6 – 3.2

Additional information : (OECD 437 method)

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)

Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)

Additional information : (OECD 451 method)

Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)

STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)

STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

#### Hranicoll D4

Viscosity, kinematic	54.2 mm <sup>2</sup> /s
----------------------	-------------------------

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

#### 11.2.2. Other information

No additional information available



# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Based on available data, the classification criteria are not met.
Hazardous to the aquatic environment, short-term (acute)	: Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long-term (chronic)	: Not classified (Based on available data, the classification criteria are not met)

#### Aluminum chloride, basic (1327-41-9)

LC50 - Fish [1]	> 1001 mg/l (Brachydanio rerio)
EC50 - Crustacea [1]	98 mg/l (Dafnie)
NOEC chronic fish	> 1001 mg/l (Brachydanio rerio)

#### Propylene carbonate (108-32-7)

LC50 - Fish [1]	> 1001 mg/l
EC50 - Crustacea [1]	> 1001 mg/l
EC50 72h - Algae [1]	900 mg/l

#### formaldehyde ...% (50-00-0)

EC50 - Crustacea [1]	5.8 mg/l Daphnia pulex OECD 202
EC50 72h - Algae [1]	4.89 mg/l Scenedesmus subspicatus OECD 201

### 12.2. Persistence and degradability

#### Hranicoll D4

Persistence and degradability	Not established.
-------------------------------	------------------

#### formaldehyde ...% (50-00-0)

Persistence and degradability	Rapidly degradable
Biodegradation	91 % days

### 12.3. Bioaccumulative potential

#### Hranicoll D4

Bioaccumulative potential	Not established.
---------------------------	------------------

### 12.4. Mobility in soil

#### Hranicoll D4

Ecology - soil	Not established.
----------------	------------------

### 12.5. Results of PBT and vPvB assessment

#### Hranicoll D4

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

# Hranicoll D4

Issue date: 1/13/2018

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024 Supersedes version of: 8/22/2023

Version: 4.3

## 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %.

## 12.7. Other adverse effects

Other adverse effects : Not known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.  
 Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
 Sewage disposal recommendations : Do not dispose of waste into sewer. Do not allow into drains or water courses.  
 Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
 Ecological information : Avoid release to the environment.  
 European List of Waste (LoW, EC 2000/532) : 08 04 10 - waste adhesives and sealants other than those mentioned in 08 04 09

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

### 14.6. Special precautions for user

**Overland transport**

Not applicable

**Transport by sea**

Not applicable

**Air transport**

Not applicable

**Inland waterway transport**

Not applicable

**Rail transport**

Not applicable

# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### REACH Annex XVII (Restriction List)

##### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
28.	formaldehyde ...%
3(b)	Aluminum chloride, basic ; Propylene carbonate ; formaldehyde ...%
72.	formaldehyde ...%
77.	formaldehyde ...%

##### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

##### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

##### Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

##### Dual-Use Regulation (428/2009)

Contains no substance subject to the COUNCIL REGULATION (EC) No 428/2009 of 5 May 2009 setting up a Community regime for the control of exports, transfer, brokering and transit of dual-use items.

##### Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

##### Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

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 (CLP)

##### United Kingdom

British National Regulations

: Directive 2008/98/EC of the European Parliament and of the Council on waste and repealing certain Directives, in the valid wording.  
 Regulation (EC) No 1013/2006 of the European Parliament and of the Council on shipments of waste, in the valid wording.  
 UK Waste Regulations.  
 UK REACH.  
 GB CLP.

# Hranicoll D4

Issue date: 1/13/2018

 according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024

Supersedes version of: 8/22/2023

Version: 4.3

## 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Indication of changes

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	

### Abbreviations and acronyms:

ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
DNEL	Derived-No Effect Level
DMEL	Derived Minimal Effect level
PNEC	Predicted No-Effect Concentration
LD50	Median lethal dose
LC50	Median lethal concentration
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA Guidance on the compilation of safety data sheets  
 ECHA C&L Inventory database. Supplier's safety documents.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

### Full text of H- and EUH-statements:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Carc. 1B	Carcinogenicity, Category 1B
EUH208	Contains formaldehyde ...%(50-00-0). May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1

# Hranicoll D4

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
 Revision date: 5/21/2024 Supersedes version of: 8/22/2023

Issue date: 1/13/2018

Version: 4.3

## Full text of H- and EUH-statements:

Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
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.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
Met. Corr. 1	Corrosive to metals, Category 1
Muta. 2	Germ cell mutagenicity, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.