

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : ISOLATEK Type Topseal, Part B

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

##### 1.2.1. Relevant identified uses

Use of the substance/mixture : For professional use only

##### 1.2.2. Uses advised against

No additional information available

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

Supplier:  
Isolatek International (Europe) Ltd.  
17 Wellington Street  
Ripley, Derbyshire  
DE5 3EH  
Toll Free: 1 800 631 9600  
[Reach@isolatek.com](mailto:Reach@isolatek.com)

#### 1.4. Emergency telephone number

Emergency number : +1 703 527 3887 (International)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

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

Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Skin sensitisation, Category 1	H317
Hazardous to the aquatic environment — Chronic Hazard, Category 3	H412

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

##### Adverse physicochemical, human health and environmental effects

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.

#### 2.2. Label elements

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

Hazard pictograms (CLP) :



GHS07

Signal word (CLP) :

Warning

Contains :

3,6,9-triazaundecamethylenediamine

Hazard statements (CLP) :

H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H319 - Causes serious eye irritation.  
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P261 - Avoid breathing mist, spray, vapours.  
P264 - Wash hands thoroughly after handling.  
P273 - Avoid release to the environment.  
P280 - Wear eye protection, protective clothing, protective gloves.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313 - If eye irritation persists: Get medical advice/attention.

#### 2.3. Other hazards

Component	
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	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

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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 is 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

Component	
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone(872-50-4)	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is 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

### 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]
Anquamine 401 (a modified tetraethylenepentamine adduct, curing agent for epoxy resins)	CAS-No.: 180583-06-6	5 – 20	Skin Sens. 1B, H317 Aquatic Chronic 2, H411
Titanium dioxide	CAS-No.: 13463-67-7 EC-No.: 236-675-5 EC Index-No.: 022-006-00-2	≤ 15	Carc. 2, H351
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)-	CAS-No.: 9046-10-0 EC-No.: 618-561-0	0.5 – 2	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1C, H314 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
3,6,9-triazaundecamethylenediamine; tetraethylenepentamine	CAS-No.: 112-57-2 EC-No.: 203-986-2 EC Index-No.: 612-060-00-0	0.1 – 1.5	Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 2, H411
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone substance listed as REACH Candidate (1-Methyl-2-pyrrolidone) substance with a Community workplace exposure limit	CAS-No.: 872-50-4 EC-No.: 212-828-1 EC Index-No.: 606-021-00-7	0.1 – 1.0	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Repr. 1B, H360D STOT SE 3, H335

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone	CAS-No.: 872-50-4 EC-No.: 212-828-1 EC Index-No.: 606-021-00-7	( 10 ≤ C ≤ 100) STOT SE 3, H335

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Allow the victim to rest.
First-aid measures after skin contact	: Immediately rinse with plenty of water (for at least 15 minutes). Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: In case of contact, immediately rinse eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if ill effect or irritation develops.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. If you feel unwell, seek medical advice.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

- Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.  
Symptoms/effects after eye contact : Eye irritation.  
Symptoms/effects after ingestion : May cause gastric irritation.

### **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 : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
Unsuitable extinguishing media : Do not use a heavy water stream.

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

- Fire hazard : On combustion, forms: carbon oxides (CO and CO<sub>2</sub>). Nitrogen oxides. Ammonia. Chlorine. Nitric acid. Nitrosamine.  
Hazardous decomposition products in case of fire : Toxic fumes may be released.

### **5.3. Advice for firefighters**

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.  
Protective equipment for firefighters : Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## **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. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Avoid breathing mist, spray, vapours.

#### **6.1.2. For emergency responders**

- Protective equipment : Do not attempt to take action without suitable protective equipment. Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.  
Emergency procedures : Ventilate area.

### **6.2. Environmental precautions**

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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

- For containment : Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel).  
Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters.  
Other information : Dispose of materials or solid residues at an authorized site.

### **6.4. Reference to other sections**

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : "Disposal considerations".

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

- Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing mist, spray, vapours.  
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

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

- Storage conditions : Keep only in the original container in a cool well ventilated place. Keep container closed when not in use. Store locked up.  
Incompatible materials : Organic acids. Mineral acids. Bases. Nitrosamine.

### **7.3. Specific end use(s)**

See Heading 1.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

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

<b>Titanium dioxide (13463-67-7)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Titandioxid (Alveolarstaub)
MAK (OEL TWA)	5 mg/m <sup>3</sup> (A)
MAK (OEL STEL)	10 mg/m <sup>3</sup> (A, 2x 60(Miw) min)
Regulatory reference	BGBI. II Nr. 238/2018
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Titane (dioxyde de) # Titaandioxide
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Титанов диоксид
OEL TWA	10 mg/m <sup>3</sup> (респирабилен прах)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Titanov dioksid
GVI (OEL TWA) [1]	10 mg/m <sup>3</sup> U (ukupna prašina) 4 mg/m <sup>3</sup> R (respirabilna prašina)
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Titandioxid
OEL TWA [1]	6 mg/m <sup>3</sup> beregnet som Ti
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Estonia - Occupational Exposure Limits</b>	
Local name	Titaanoksiid
OEL TWA	5 mg/m <sup>3</sup>
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
<b>France - Occupational Exposure Limits</b>	
Local name	Titane (dioxyde de), en Ti
VME (OEL TWA)	10 mg/m <sup>3</sup>
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Τιτανίου διοξειδίο
OEL TWA	10 mg/m <sup>3</sup> εισπν. 5 mg/m <sup>3</sup> σναπν.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Titanium dioxide (13463-67-7)</b>	
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Titanium dioxide
OEL TWA [1]	10 mg/m <sup>3</sup> total inhalable dust 4 mg/m <sup>3</sup> respirable dust
OEL STEL	30 mg/m <sup>3</sup> (calculated-respirable dust) 12 mg/m <sup>3</sup> (calculated)
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Titāna dioksīds
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	Titano dioksidas
IPRV (OEL TWA)	5 mg/m <sup>3</sup>
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Poland - Occupational Exposure Limits</b>	
Local name	Ditlenek tytanu
NDS (OEL TWA)	10 mg/m <sup>3</sup> frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Obowiązuje jednocześnie oznaczanie stężeń frakcji respirabilnej krzemionki krystalicznej.
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Dióxido de titânio
OEL TWA	10 mg/m <sup>3</sup>
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Romania - Occupational Exposure Limits</b>	
Local name	Dioxid de titan
OEL TWA	10 mg/m <sup>3</sup>
OEL STEL	15 mg/m <sup>3</sup>
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	Oxid titaničitý
NPHV (OEL TWA) [1]	5 mg/m <sup>3</sup>
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Titanium dioxide (13463-67-7)</b>	
<b>Spain - Occupational Exposure Limits</b>	
Local name	Dióxido de titanio
VLA-ED (OEL TWA) [1]	10 mg/m <sup>3</sup>
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Titandioxid
NGV (OEL TWA)	5 mg/m <sup>3</sup> totaldamm
Remark	3 (Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagnings av totaldamm och respirabelt damm, Metod nr 1010, Arbetskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Titanium dioxide
WEL TWA (OEL TWA) [1]	4 mg/m <sup>3</sup> respirable 10 mg/m <sup>3</sup> total inhalable
WEL STEL (OEL STEL)	30 mg/m <sup>3</sup> (calculated-total inhalable) 12 mg/m <sup>3</sup> (calculated-respirable)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Titanium dioxide
ACGIH OEL TWA	10 mg/m <sup>3</sup>
Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH chemical category	Not Classifiable as a Human Carcinogen
Regulatory reference	ACGIH 2021
<b>Kaolin (1332-58-7 )</b>	
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Kaolin (fraction alvéolaire) # Kaolien (inadembare fractie)
OEL TWA	2 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Каолин, съдържащ под 2 % свободен кристален силициев диоксид в респирабилната фракция
OEL TWA	6 mg/m <sup>3</sup> (Инхалабилна фракция) 3 mg/m <sup>3</sup> (Респирабилна фракция)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Kaolin
GVI (OEL TWA) [1]	2 mg/m <sup>3</sup> R (respirabilna prašina)

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Kaolin (1332-58-7 )</b>	
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Kaolin
OEL TWA [1]	2 mg/m <sup>3</sup> respirabel
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Finland - Occupational Exposure Limits</b>	
Local name	Kaoliini
HTP (OEL TWA) [1]	2 mg/m <sup>3</sup> alveolijae
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Kaolin, respirable dust
OEL TWA [1]	2 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Poland - Occupational Exposure Limits</b>	
Local name	Kaolin
NDS (OEL TWA)	10 mg/m <sup>3</sup> frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia. Obowiązuje jednocześnie oznaczanie stężeń frakcji respirabilnej krzemionki krystalicznej.
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Caulino
OEL TWA	2 mg/m <sup>3</sup> E (O valor aplica-se a partículas sem amianto e contendo menos de 1 % de sílica cristalina), R (Fração respirável)
Remark	A4 (Agente não classificável como carcinogénico no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Kaolin
WEL TWA (OEL TWA) [1]	2 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>USA - ACGIH - Occupational Exposure Limits</b>	
Local name	Kaolin
ACGIH OEL TWA	2 mg/m <sup>3</sup> (E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica, R - Respirable particulate matter)
Remark (ACGIH)	TLV® Basis: Pneumoconiosis. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2021
<b>Diethylene glycol (111-46-6)</b>	
<b>Austria - Occupational Exposure Limits</b>	
Local name	Diethylenglykol
MAK (OEL TWA)	44 mg/m <sup>3</sup>

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Diethylene glycol (111-46-6)</b>	
MAK (OEL TWA) [ppm]	10 ppm
MAK (OEL STEL)	176 mg/m <sup>3</sup> (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	40 ppm (4x 15(Miw) min)
Regulatory reference	BGBI. II Nr. 238/2018
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	Диетиленгликол
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	2,2'-Oksibisetanol; dietilen-glikol
GVI (OEL TWA) [1]	101 mg/m <sup>3</sup>
GVI (OEL TWA) [2]	23 ppm
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Diethylenglycol
OEL TWA [1]	11 mg/m <sup>3</sup>
OEL TWA [2]	2.5 ppm
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Estonia - Occupational Exposure Limits</b>	
Local name	2,2'-hüdroksüdietanol (dietüleenglükool)
OEL TWA	45 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	90 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	2,2'-Oxydiethanol
AGW (OEL TWA) [1]	44 mg/m <sup>3</sup>
AGW (OEL TWA) [2]	10 ppm
Peak exposure limitation factor	4(II)
Remark	DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 11 - Summe aus Dampf und Aerosolen
Regulatory reference	TRGS900
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Diethylene glycol [2,2'-Oxydiethanol]



# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Diethylene glycol (111-46-6)</b>	
OEL TWA [1]	100 mg/m <sup>3</sup>
OEL TWA [2]	23 ppm
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Latvia - Occupational Exposure Limits</b>	
Local name	Dietilēnglikols (2,2' oksibisetanols, 2,2' dihidroksidietilēteris)
OEL TWA	10 mg/m <sup>3</sup>
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	2,2-oksidiētānolis (dietilēnglikolis, diglikolis)
IPRV (OEL TWA)	45 mg/m <sup>3</sup>
IPRV (OEL TWA) [ppm]	10 ppm
TPRV (OEL STEL)	90 mg/m <sup>3</sup>
TPRV (OEL STEL) [ppm]	20 ppm
Remark	O (medžiaga į organizmą gali prasiskverbti pro nepažeistą odą)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Poland - Occupational Exposure Limits</b>	
Local name	2,2'-Oksydietanol (glikol dwuetylenowy)
NDS (OEL TWA)	10 mg/m <sup>3</sup> frakcja wdychalna
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Romania - Occupational Exposure Limits</b>	
Local name	2,2' oxibisetanol/Dietilenglicol
OEL TWA	500 mg/m <sup>3</sup>
OEL TWA [ppm]	115 ppm
OEL STEL	800 mg/m <sup>3</sup>
OEL STEL [ppm]	184 ppm
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	Dietylēnglykol (2,2'-oxydietanol)
NPHV (OEL TWA) [1]	44 mg/m <sup>3</sup>
NPHV (OEL TWA) [2]	10 ppm
NPHV (OEL STEL)	90 mg/m <sup>3</sup>
NPHV (OEL STEL) [ppm]	20 ppm
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	2,2'-oksidiētānol
OEL TWA	44 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Diethylene glycol (111-46-6)</b>	
OEL STEL	176 mg/m <sup>3</sup>
OEL STEL [ppm]	40 ppm
Remark	Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti)
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Sweden - Occupational Exposure Limits</b>	
Local name	Dietylenglykol
NGV (OEL TWA)	45 mg/m <sup>3</sup>
NGV (OEL TWA) [ppm]	10 ppm
KTV (OEL STEL)	90 mg/m <sup>3</sup>
KTV (OEL STEL) [ppm]	20 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga); V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas)
Regulatory reference	Hygieniska gränsvärden (AFS 2018:1)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	2,2'-Oxydiethanol
WEL TWA (OEL TWA) [1]	101 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	23 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	n-Methyl-2-pyrrolidone
IOEL TWA	40 mg/m <sup>3</sup>
IOEL STEL	80 mg/m <sup>3</sup>
IOEL STEL [ppm]	20 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
<b>EU - Biological Limit Value (BLV)</b>	
Local name	N-Methyl-2-pyrrolidone
BLV	20 mg/g creatinine Parameter: 2-hydroxy-N-methylsuccinimide - Medium: urine - Sampling time: morning-after-shift ; 18 hours 70 mg/g creatinine Parameter: 5-hydroxy-N-methyl-2-pyrrolidone - Medium: urine - Sampling time: 2-4 hours after the end of exposure/shift
Regulatory reference	SCOEL List of recommended health-based BLVs and BGVs
<b>Austria - Occupational Exposure Limits</b>	
Local name	N-Methyl-2-pyrrolidon
MAK (OEL TWA)	40 mg/m <sup>3</sup>
MAK (OEL TWA) [ppm]	10 ppm
MAK (OEL STEL)	80 mg/m <sup>3</sup> (4x 15(Miw) min)
MAK (OEL STEL) [ppm]	20 ppm (4x 15(Miw) min)

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
Remark	H, Sh. Fortpflanzungsgefährdend: D
Regulatory reference	BGBl. II Nr. 238/2018
<b>Belgium - Occupational Exposure Limits</b>	
Local name	N-méthyl-2-pyrrolidone # N-Methyl-2-pyrrolidon
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	D: la mention "D" signifie que la résorption de l'agent, via la peau, les muqueuses ou les yeux, constitue une partie importante de l'exposition totale. Cette résorption peut se faire tant par contact direct que par présence de l'agent dans l'air. # D: de vermelding "D" betekent dat de opname van het agens via de huid, de slijmvliezen of de ogen een belangrijk deel van de totale blootstelling vormt. Deze opname kan het gevolg zijn van zowel direct contact als zijn aanwezigheid in de lucht.
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
<b>Bulgaria - Occupational Exposure Limits</b>	
Local name	n-метил-2-пирилодон
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Кожа (възможна е значителна резорбция чрез кожата); • (Химични агенти, за които са определени гранични стойности във въздуха на работната среда за Европейската общност)
Regulatory reference	Наредба № 13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа (изм. и доп. ДВ. бр. 47 от 2021 г., в сила от 04.06.2021 г.)
<b>Croatia - Occupational Exposure Limits</b>	
Local name	N-metil-2-pirolidon; 1-metil-2-pirolidon
GVI (OEL TWA) [1]	40 mg/m <sup>3</sup>
GVI (OEL TWA) [2]	10 ppm
KGVI (OEL STEL)	80 mg/m <sup>3</sup>
KGVI (OEL STEL) [ppm]	20 ppm
Remark	Direktiva: 2009/161/EU. Napomena: Koža (razvrstana kao tvar koja nadražuje kožu (H315)), Repr 1B
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Croatia - Biological limit values</b>	
Local name	N-metil-2-pirolidon
BLV	20 mg/g creatinine Karakteristični pokazatelj: 2-hidroksi-N-metilsukcinimid - Biološki uzorak: mokraća - Vrijeme uzorkovanja: Oko 16 sati nakon završetka radne smjene 70 mg/g creatinine Karakteristični pokazatelj: 5-hidroksi-N-metil-2-pirolidon - Biološki uzorak: mokraća - Vrijeme uzorkovanja: (2-4 nakon radne smjene/prekida
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 91/2018)

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	1-Methyl-2-pyrrolidinon
PEL (OEL TWA)	40 mg/m <sup>3</sup>
PEL (OEL TWA) [ppm]	9.7 ppm
NPK-P (OEL C)	80 mg/m <sup>3</sup>
NPK-P (OEL C) [ppm]	19.4 ppm
Remark	D - při expozici se významně uplatňuje pronikání faktoru kůží, I - dráždí sliznice (oči, dýchací cesty), respektive kůži, T - toxický pro reprodukci kategorie 1A a 1B (s větou H360 včetně příslušných kódů).
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	N-Methyl-2-pyrrolidon
OEL TWA [1]	20 mg/m <sup>3</sup>
OEL TWA [2]	5 ppm
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Estonia - Occupational Exposure Limits</b>	
Local name	N-metüül-2-pürrolidoon
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	A (Naha kaudu kergesti imenduv aine)
Regulatory reference	Vabariigi Valitsuse 20. märtsi 2001. a määruse nr 105 (RT I, 17.10.2019, 2); Vabariigi Valitsuse 10. märtsi 2019. a määruse nr 84
<b>Finland - Occupational Exposure Limits</b>	
Local name	N-Metyylipyrrolidoni
HTP (OEL TWA) [1]	14 mg/m <sup>3</sup>
HTP (OEL TWA) [2]	3.5 ppm
HTP (OEL STEL)	80 mg/m <sup>3</sup>
HTP (OEL STEL) [ppm]	20 ppm
Remark	Iho
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden ministeriö)
<b>Finland - Biological limit values</b>	
BLV	8 µmol/mol Creatinine Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone - Medium: urine - Sampling time: in the morning after a working day 5 µmol/mol Creatinine Parameter: 2-Hydroxy-N-methyl-succinimide - Medium: urine - Sampling time: after the shift
<b>France - Occupational Exposure Limits</b>	
Local name	N-Méthyl-2-pyrrolidone
VME (OEL TWA)	40 mg/m <sup>3</sup>
VME (OEL TWA) [ppm]	10 ppm

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
VLE (OEL C/STEL)	80 mg/m <sup>3</sup>
VLE (OEL C/STEL) [ppm]	20 ppm
Remark	Valeurs réglementaires indicatives; risque de pénétration percutanée; substance classée toxique pour la reproduction de catégorie 1B
Regulatory reference	Arrêté du 30 juin 2004 modifié (réf.: INRS ED 984, 2016)
<b>Germany - Occupational Exposure Limits (TRGS 900)</b>	
Local name	N-Methyl-2-pyrrolidon (Dampf)
AGW (OEL TWA) [1]	82 mg/m <sup>3</sup>
AGW (OEL TWA) [2]	20 ppm
Peak exposure limitation factor	2(l)
Remark	EU - Europäische Union (Von der EU wurde ein Luftgrenzwert festgelegt: Abweichungen bei Wert und Spitzenbegrenzung sind möglich); DFG - Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG (MAK-Kommission); AGS - Ausschuss für Gefahrstoffe; H - hautresorptiv; Y - Ein Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes (BGW) nicht befürchtet zu werden; 11 - Summe aus Dampf und Aerosolen; 19 - Die Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG hat in der MAK- und BAT-Werte-Liste zum gleichlautenden MAK-Wert auch einen BAT-Wert festgelegt; 32 - Gemäß Änderung von Anhang XVII der Verordnung (EG) Nr. 1907/2006 ( <a href="https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32018R0588&amp;from=DE">https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32018R0588&amp;from=DE</a> ) gilt ab 10. Mai 2020 eine Verwendungsbeschränkung für NMP, wenn der dort genannte Luftgrenzwert nicht eingehalten wird
Regulatory reference	TRGS900
<b>Germany - Biological limit values (TRGS 903)</b>	
Local name	N-Methyl-2-pyrrolidon
Biological limit value	150 mg/l Parameter: 5-Hydroxy- N-methyl-2-pyrrolidon - Untersuchungsmaterial: U = Urin - Probenahmezeitpunkt: b) Expositionsende, bzw. Schichtende - Festlegung/Begründung: 05/2013 DFG
Regulatory reference	TRGS 903
<b>Gibraltar - Occupational Exposure Limits</b>	
Local name	n-Methyl-2-pyrrolidone
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Skin
Regulatory reference	Factories (Control of Chemical Agents at Work) Regulations 2003 (LN. 2018/181)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Μεθυλ-2-πυρολιδόνη, N-
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Η ένδειξη «δέρμα» στις οριακές τιμές επαγγελματικής έκθεσης επισημαίνει το ενδεχόμενο σημαντικής διείσδυσης μέσω του δέρματος.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
Regulatory reference	Π.Δ. 12/2012 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Hungary - Occupational Exposure Limits</b>	
Local name	N-METIL-2-PIRROLIDON
AK (OEL TWA)	40 mg/m <sup>3</sup>
CK (OEL STEL)	80 mg/m <sup>3</sup>
Remark	b (Bőrön át is felszívódik); EU3 (2009/161 /EK irányelvben közölt érték); T (Azok az anyagok, amelyek egészségkárosító hatása TARTÓS expozíciót követően jelentkezik)
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
<b>Ireland - Occupational Exposure Limits</b>	
Local name	n-Methyl-2-pyrrolidone
OEL TWA [1]	40 mg/m <sup>3</sup>
OEL TWA [2]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Sk (Substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body), IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Ireland - Biological limit values</b>	
Local name	N-Methyl-2-Pyrrolidone
BLV	20 mg/g creatinine Parameter: 2-HMSI - Medium: urine - Notations: 2-HMSI measured morning after shift (8hrs) 70 mg/g creatinine Parameter: 5-HNMP - Medium: urine - Sampling time: End of shift - Notations: 5-HNMP measured 2-4hrs after the end of the shift
Regulatory reference	Biological Monitoring Guidelines (HSA, 2011)
<b>Italy - Occupational Exposure Limits</b>	
Local name	n-Metil-2-pirrolidone
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Cute
Regulatory reference	Allegato XXXVIII del D.Lgs. 9 aprile 2008, n. 81 e s.m.i.
<b>Latvia - Occupational Exposure Limits</b>	
Local name	1-metil-2-pirolidīnons (N-metil-2-pirolidons)
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Āda

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2011. gada 1. februārī noteikumiem Nr. 92)
<b>Lithuania - Occupational Exposure Limits</b>	
Local name	n-metil-2-pirolidonas
IPRV (OEL TWA)	40 mg/m <sup>3</sup>
IPRV (OEL TWA) [ppm]	10 ppm
TPRV (OEL STEL)	80 mg/m <sup>3</sup>
TPRV (OEL STEL) [ppm]	20 ppm
Remark	R (reprodukcijai toksisks poveikis); O (medžiaga j organismā gali prasiskverbti pro nepažeistā odā)
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
<b>Malta - Occupational Exposure Limits</b>	
Local name	n-Methyl-2-pyrrolidone
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	Skin # Ģilda
Regulatory reference	S.L.424.24 - Chemical Agents at Work Regulations (L.N.57 of 2018)
<b>Netherlands - Occupational Exposure Limits</b>	
Local name	N-Methyl-2-pyrrolidon
MAC-TGG (OEL TWA)	40 mg/m <sup>3</sup>
MAC-15 (OEL STEL)	80 mg/m <sup>3</sup>
Remark	H (Huidopname) Stoffen die relatief gemakkelijk door de huid kunnen worden opgenomen, hetgeen een substantiële bijdrage kan betekenen aan de totale inwendige blootstelling, hebben in de lijst een H-aanduiding. Bij deze stoffen moeten naast maatregelen tegen inademing ook adequate maatregelen ter voorkoming van huidcontact worden genomen.
Regulatory reference	Arbeidsomstandighedenregeling 2021
<b>Poland - Occupational Exposure Limits</b>	
Local name	1-Metylo-2-pirolidon
NDS (OEL TWA)	40 mg/m <sup>3</sup>
NDSch (OEL STEL)	80 mg/m <sup>3</sup>
Remark	Skóra (Oznakowanie substancji notacją „skóra” oznacza, że wchłanianie substancji przez skórę może być tak samo istotne jak przy narażeniu drogą oddechową).
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Biological Exposure Indices</b>	
Local name	N-Metil-2-pirrolidona
BEI	100 mg/l Parâmetro: 5-Hidroxi-N-metil-2-pirrolidona - Meio: urina - Momento da amostragem: Fim do turno
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Romania - Occupational Exposure Limits</b>	
Local name	n-metil-2-pirolidonă

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	P - posibilitatea unei penetrări cutanate importante; R1B - poate dăuna fătului; poate dăuna fertilității
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 53/2021)
<b>Slovakia - Occupational Exposure Limits</b>	
Local name	N-Metyl-2-pyrolidon
NPHV (OEL TWA) [1]	40 mg/m <sup>3</sup>
NPHV (OEL TWA) [2]	10 ppm
NPHV (OEL STEL)	80 mg/m <sup>3</sup>
NPHV (OEL STEL) [ppm]	20 ppm
Remark	K - znamená, že faktor môže byť ľahko absorbovaný kožou
Regulatory reference	Nariadenie vlády č. 355/2006 Z. z. (236/2020 Z. z.)
<b>Slovenia - Occupational Exposure Limits</b>	
Local name	N-metil-2-pirolidon (pare)
OEL TWA	40 mg/m <sup>3</sup>
OEL TWA [ppm]	10 ppm
OEL STEL	80 mg/m <sup>3</sup>
OEL STEL [ppm]	20 ppm
Remark	K (Lastnost lažjega prehajanja snovi v organizem skozi kožo), Y (Snovi, pri katerih ni nevarnosti za zarodek ob upoštevanju mejnih vrednosti in bat vrednosti), BAT (Biološka mejna vrednost), EU
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Slovenia - Biological limit values</b>	
Local name	N-metilpirolidin
BLV	150 mg/l Parameter: 5-hidroksi-N-metil-2-pirolidin - Biološki vzorec: urin - Čas vzorčenja: ob koncu delovne izmene
Regulatory reference	Uradni list RS, št. 72/2021 z dne 11.5.2021
<b>Spain - Occupational Exposure Limits</b>	
Local name	N-Metil-2-pirrolidona
VLA-ED (OEL TWA) [1]	40 mg/m <sup>3</sup>
VLA-ED (OEL TWA) [2]	10 ppm
VLA-EC (OEL STEL)	80 mg/m <sup>3</sup>
VLA-EC (OEL STEL) [ppm]	20 ppm



# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
Remark	Vía dérmica (Indica que, en las exposiciones a esta sustancia, la aportación por la vía cutánea puede resultar significativa para el contenido corporal total si no se adoptan medidas para prevenir la absorción. En estas situaciones, es aconsejable la utilización del control biológico para poder cuantificar la cantidad global absorbida del contaminante), VLI (Agente químico para el que la U.E. estableció en su día un valor límite indicativo), VLB® (Agente químico que tiene Valor Límite Biológico), TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) nº 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos" (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido).
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
<b>Spain - Biological limit values</b>	
Local name	N-Metil-2-pirrolidona
BLV	20 mg/g creatinine Parámetro: 2-hidroxi-N-metilsuccinimida - Medio: orina - Momento de muestreo: Antes de la jornada laboral 70 mg/g creatinine Parámetro: 5-hidroxi-N-metil-2-pirrolidona - Medio: orina - Momento de muestreo: Entre 2 y 4 horas después del final la exposición
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
Local name	N-Metyl-2-pyrrolidon (NMP)
NGV (OEL TWA)	14.4 mg/m <sup>3</sup> 40 mg/m <sup>3</sup>
NGV (OEL TWA) [ppm]	3.6 ppm 10 ppm
KTV (OEL STEL)	80 mg/m <sup>3</sup>
KTV (OEL STEL) [ppm]	20 ppm
Remark	H (Ämnet kan lätt upptas genom huden. Det föreskrivna gränsvärdet bedöms ge tillräckligt skydd endast under förutsättning att huden är skyddad mot exponering för ämnet ifråga); R (Ämnet är reproduktionsstörande. Med reproduktionsstörande ämnen avses ämnen som kan medföra skadliga effekter på fortplantningsförmågan eller avkommans utveckling)
Regulatory reference	Hygieniska gränsvärden (AFS 2020:6)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	n-Methyl-2-pyrrolidone
WEL TWA (OEL TWA) [1]	40 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	10 ppm
WEL STEL (OEL STEL)	80 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	20 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
<b>USA - ACGIH - Biological Exposure Indices</b>	
Local name	N-METHYL-2-PYRROLIDONE

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
BEI	100 mg/l Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone - Medium: urine - Sampling time: End of shift
Regulatory reference	ACGIH 2021
<b>Carbon Black (1333-86-4)</b>	
<b>Belgium - Occupational Exposure Limits</b>	
Local name	Carbone (noir de) # Koolzwart
OEL TWA	3 mg/m <sup>3</sup>
Regulatory reference	Koninklijk besluit/Arrêté royal 19/11/2020
<b>Croatia - Occupational Exposure Limits</b>	
Local name	Ugljik-crni
GVI (OEL TWA) [1]	3.5 mg/m <sup>3</sup>
KGVI (OEL STEL)	7 mg/m <sup>3</sup>
Regulatory reference	Pravilnik o izmjenama i dopunama Pravilnika o graničnim vrijednostima izloženosti opasnim tvarima pri radu i o biološkim graničnim vrijednostima (NN 1/2021)
<b>Czech Republic - Occupational Exposure Limits</b>	
Local name	Amorfní uhlík (Carbon Black)
PEL (OEL TWA)	2 mg/m <sup>3</sup> (dust)
Remark	Prachy s převážně nespecifickým účinkem.
Regulatory reference	Nařízení vlády č. 361/2007 Sb. (Předpis 195/2021 Sb.)
<b>Denmark - Occupational Exposure Limits</b>	
Local name	Carbon black
OEL TWA [1]	3.5 mg/m <sup>3</sup>
Remark	K (betyder, at stoffet anses for at kunne være kræftfremkaldende)
Regulatory reference	BEK nr 1426 af 28. juni 2021
<b>Estonia - Occupational Exposure Limits</b>	
OEL TWA	3 mg/m <sup>3</sup> (dust (Dusts))
<b>Finland - Occupational Exposure Limits</b>	
Local name	Nokimusta
HTP (OEL TWA) [1]	3.5 mg/m <sup>3</sup>
HTP (OEL STEL)	7 mg/m <sup>3</sup>
Regulatory reference	HTP-ARVOT 2020 (Sosiaali- ja terveystieteiden tutkimuskeskus)
<b>France - Occupational Exposure Limits</b>	
Local name	Noir de carbone
VME (OEL TWA)	3.5 mg/m <sup>3</sup>
Remark	Valeurs recommandées/admises
Regulatory reference	Circulaire du Ministère du travail (réf.: INRS ED 984, 2016)
<b>Greece - Occupational Exposure Limits</b>	
Local name	Αιθάλη
OEL TWA	3.5 mg/m <sup>3</sup>
OEL STEL	7 mg/m <sup>3</sup>

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Carbon Black (1333-86-4)</b>	
Regulatory reference	Π.Δ. 90/1999 - Προστασία της υγείας των εργαζομένων που εκτίθενται σε ορισμένους χημικούς παράγοντες κατά τη διάρκεια της εργασίας τους
<b>Hungary - Occupational Exposure Limits</b>	
Local name	Ipari korom [„Carbon Black”]
AK (OEL TWA)	3 mg/m <sup>3</sup> belélegezhető koncentráció
Regulatory reference	5/2020. (II. 6.) ITM rendelet - A kémiai kóroki tényezők hatásának kitett munkavállalók egészségének és biztonságának védelméről
<b>Ireland - Occupational Exposure Limits</b>	
Local name	Carbon black
OEL TWA [1]	3 mg/m <sup>3</sup> (inhalable fraction)
OEL STEL	15 mg/m <sup>3</sup> (calculated-inhalable fraction)
Regulatory reference	Chemical Agents Code of Practice 2021
<b>Poland - Occupational Exposure Limits</b>	
Local name	Sadza techniczna
NDS (OEL TWA)	4 mg/m <sup>3</sup> (inhalable fraction)
Remark	Frakcja wdychalna – frakcja aerozolu wnikająca przez nos i usta, która po zdeponowaniu w drogach oddechowych stwarza zagrożenie dla zdrowia.
Regulatory reference	Dz. U. 2018 poz. 1286
<b>Portugal - Occupational Exposure Limits</b>	
Local name	Carbono, preto (Negro de fumo)
OEL TWA	3 mg/m <sup>3</sup>
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Remark	A3 (Agente carcinogénico confirmado nos animais de laboratorio con relevância desconhecida no Homem)
Regulatory reference	Norma Portuguesa NP 1796:2014
<b>Slovakia - Occupational Exposure Limits</b>	
NPHV (OEL TWA) [1]	2 mg/m <sup>3</sup> (respirable fraction, 5% or less fibrogenic component) 10 mg/m <sup>3</sup> (respirable fraction, greater than 5% fibrogenic component) 10 mg/m <sup>3</sup> (total aerosol)
<b>Spain - Occupational Exposure Limits</b>	
Local name	Negro de humo
VLA-ED (OEL TWA) [1]	3.5 mg/m <sup>3</sup>
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT
<b>Sweden - Occupational Exposure Limits</b>	
NGV (OEL TWA)	3 mg/m <sup>3</sup> (inhalable fraction)
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Carbon black
WEL TWA (OEL TWA) [1]	3.5 mg/m <sup>3</sup>
WEL STEL (OEL STEL)	7 mg/m <sup>3</sup>
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Carbon Black (1333-86-4)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Carbon black
ACGIH OEL TWA	3 mg/m <sup>3</sup> (inhalable particulate matter)
Remark (ACGIH)	TLV® Basis: Bronchitis. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Regulatory reference	ACGIH 2021

### 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

No additional information available

### 8.1.5. Control banding

No additional information available

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure.

#### 8.2.2.1. Eye and face protection

##### Eye protection:

Use eye protection according to EN 166.

#### 8.2.2.2. Skin protection

##### Hand protection:

Wear suitable gloves tested to EN374

##### Other skin protection

##### Materials for protective clothing:

Long sleeved protective clothing

#### 8.2.2.3. Respiratory protection

##### Respiratory protection:

An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits

#### 8.2.2.4. Thermal hazards

No additional information available

### 8.2.3. Environmental exposure controls

#### Environmental exposure controls:

Avoid release to the environment.

#### Other information:

Do not eat, drink or smoke during use.

## SECTION 9: Physical and chemical properties

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

Physical state : Liquid  
Colour : Light grey.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Appearance	: Light grey. Liquid.
Odour	: Mild odour. Ammoniacal.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Not applicable
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: Not available
Solubility	: Water: Suspension
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 1.4 – 1.7
Relative density	: Not available
Relative vapour density at 20 °C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: 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**

Relative evaporation rate (butylacetate=1)	: < 1
Volatility	: 30 %

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

Reacts violently with peroxides.

### **10.2. Chemical stability**

The product is stable at normal handling and storage conditions.

### **10.3. Possibility of hazardous reactions**

No dangerous reactions known under normal conditions of use. Hazardous polymerization will not occur.

### **10.4. Conditions to avoid**

Do not store in aluminium, galvanized or other corrodable containers.

### **10.5. Incompatible materials**

Oxidizing agents. Organic acids. Mineral acids. Bases. Nitrosamine.

### **10.6. Hazardous decomposition products**

Thermal decomposition can lead to the release of irritating gases and vapours. On combustion, forms: carbon oxides (CO and CO<sub>2</sub>). Nitrogen oxides. Chlorine. Ammonia. Nitric acid. Nitrosamine.

## **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)

### **Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)**

LD50 oral rat	242 mg/kg
LD50 dermal rabbit	2980 mg/kg

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

<b>Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-(2-aminomethylethyl)-.omega.-(2-aminomethylethoxy)- (9046-10-0)</b>	
LC50 Inhalation - Rat	> 0.74 mg/l (Exposure time: 8 h)
<b>Titanium dioxide (13463-67-7)</b>	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rat	> 10000 mg/kg
LC50 Inhalation - Rat	5.09 mg/l/4h
<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
LC50 Inhalation - Rat	> 5.1 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
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)

<b>Titanium dioxide (13463-67-7)</b>	
IARC group	2B - Possibly carcinogenic to humans
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)

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
STOT-single exposure	May cause respiratory irritation.
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)

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	: None known
--	--------------

#### 11.2.2. Other information

Other information	: Likely routes of exposure: ingestion, inhalation, skin and eye
-------------------	--

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Harmful to aquatic life with long lasting effects.
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)	: Harmful to aquatic life with long lasting effects.

<b>N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)</b>	
LC50 - Fish [1]	832 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
LC50 - Fish [2]	1072 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	4897 mg/l (Exposure time: 48 h - Species: Daphnia magna)

### 12.2. Persistence and degradability

<b>ISOLATEK® Type Topseal®, Part B</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>ISOLATEK® Type Topseal®, Part B</b>	
Bioaccumulative potential	Not established.

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)

Partition coefficient n-octanol/water (Log Pow)	-0.46 (at 25 °C)
---	------------------

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

##### Component

N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone (872-50-4)	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
---	---

#### 12.6. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.  
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.  
Ecology - waste materials : Avoid release to the environment.

### 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 regulated	Not regulated	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
<b>14.4. Packing group</b>				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Not applicable	Not regulated	Not regulated	Not applicable	Not applicable
No supplementary information available				

#### 14.6. Special precautions for user

##### Overland transport

Not applicable

##### Transport by sea

Not regulated

##### Air transport

Not regulated

##### Inland waterway transport

Not applicable

##### Rail transport

Not applicable

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

Not applicable

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 15: Regulatory information

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

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration  $\geq 0.1\%$  or with a lower specific limit: 1-Methyl-2-pyrrolidone (EC 212-828-1, CAS 872-50-4)

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

##### 15.1.2. National regulations

France	
Occupational diseases	
Code	Description
RG 84	Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide

##### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)  
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)

Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

##### Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : None of the components are listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : None of the components are listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : N-methyl-2-pyrrolidone, 1-methyl-2-pyrrolidone is listed

##### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product  
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

### SECTION 16: Other information

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value



# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
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 Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

Sources of Key data

: 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information

: None.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4

# ISOLATEK® Type Topseal® Part B

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 3	H412	Calculation method

Safety Data Sheet (SDS), EU

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.