

# System 700

## NEWTON 701-HB (Part A)

### High Build Epoxy Floor Coating



Rev 2.1 - 03 April 2019

PRODUCT CODE - 701-HB

## 1. Identification of the Substance/Mixture and of the Company/Undertaking

### Product Identifier

- Product name: Newton 701-HB (Part A)
- Product code: 701-HB

### Relevant identified uses of the substance and uses advised against

- Use of substance/mixture: IPC1: Adhesives, sealants  
PC9a: Coatings and paints, thinners, paint removers

### Details of the Supplier of the Material Safety Data Sheet

- Company Address: Newton Waterproofing Systems, Newton House, 17-20 Sovereign Way, Tonbridge, Kent TN9 1RH
- Web: www.newtonwaterproofing.co.uk
- Email address of the competent person: info@newtonwaterproofing.co.uk
- Emergency telephone number: +44 (0)1732 360095: 08:00/17:30 (GMT) Mon-Thur & 08:00/17:00 (GMT) Fri



## 2. Hazards Identification

- Refer to Section 16 for: The explanation of the abbreviations used throughout this MSDS  
The full list of Hazard Phrases stated throughout this MSDS

### 2.1 Classification of the Substance or Mixture Product Identifier

- Classification under CLP: Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1: H317
- Most important adverse effects: Causes skin irritation. May cause an allergic skin reaction.  
Causes serious eye irritation. Toxic to aquatic life with long lasting effects

### 2.2 Label Elements

- Hazard statements: H315: Causes skin irritation  
H317: May cause an allergic skin reaction  
H319: Causes serious eye irritation  
H411: Toxic to aquatic life with long lasting effects
- Signal words: Warning
- Hazard pictograms: GHS07 Exclamation Mark  GHS09 Environmental 
- Precautionary statements: P262: Do not get in eyes, on skin, or on clothing  
P273: Avoid release to the environment  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P302+352: IF ON SKIN: Wash with plenty of soap and water  
P301+312: IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell  
P502: Refer to manufacturer/supplier for information on recovery/recycling

### 2.3 Other Hazards

- PBT / vPvB This product is not identified as a PBT / vPvB substance
- Other Hazards NDA

## 3. Composition/information on ingredients

**3.2 Mixture** This product is a mixture  
Hazardous Substances

Chemical name	CAS	EINECS	REACH Registration Number	Percent	Classification
Barium sulphate	7727-43-7	231-784-4	01-2119491274-35-####	30-50	
Bisphenol A-(epichlorhydrin)(reaction product)	25068-38-6	500-033-5	01-2119456619-26-####	20-30	Eye Irrit. 2: H319 Skin Irrit. 2: H315 Skin Sens. 1: H317 Aquatic Chronic 2: H411
Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol	9003-36-5	500-006-8	01-2119454392-40-####	10-20	Skin Irrit. 2 H315 Skin Sens. 1: H317 Aquatic Chronic 2: H411
Oxirane, mono [(C12-14-alkyloxy)methyl] derivatives	68609-97-2	271-846-8	01-2119485289-22-####	3-10	Skin Irrit. 2: H315 Skin Sens. 1: H317
Silica, respirable crystalline	-	-	-	1-3	STOT RE 1: H372
Benzyl alcohol	100-51-6	202-859-9	-	<1	Acute Tox. 4: H332 Acute Tox. 4: H302

NB Please also refer to Section 8 Personal Protection / Exposure Controls

## 4. First Aid Measures

### 4.1 Description of First Aid Measures

- Skin contact** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor
- Eye contact** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination
- Ingestion** Wash out mouth with water. Consult a doctor. Transfer to hospital as soon as possible
- Inhalation** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

- Skin contact** There may be irritation and redness at the site of contact. There may be redness or whiteness of the skin in the areas of exposure. An itchy rash may occur at the site of contact
- Eye contact** There may be irritation and redness. The eyes may water profusely. There may be severe pain
- Ingestion** There may be soreness and redness of the mouth and throat. There may be vomiting
- Inhalation** Exposure may cause coughing or wheezing

- Delayed / immediate effects      Immediate effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure

#### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

- Immediate / special treatment      Show this safety data sheet to the doctor in attendance. Immediate medical attention is required  
    Eye bathing equipment should be available at the work premises

### 5. Fire-Fighting Measures

- 5.1 Extinguishing Media**      Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers
- 5.2 Special Hazards Arising from the Material**  
    In combustion emits toxic fumes
- 5.3 Advice for Firefighters**      Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

### 6. Accidental Release Measures

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Do not attempt to take action without wearing suitable personal protection, refer to Section 8.2 of the MSDS

Evacuate unnecessary personnel. If outside do not approach from downwind. If outside keep bystanders and passing persons upwind and away from the danger point. Mark out the contaminated area with signage and prevent access by unauthorised persons

Turn leaking containers leak-side up to prevent the escape of material, and place in a leak proof labelled container

#### 6.2 Environmental Precautions

Do not discharge into drains or water courses. Contain the spillage using bunding

#### 6.3 Methods and Materials for Containment and Cleaning Up

Clean-up should ONLY be dealt with by a qualified person familiar with the specific substance

Large spillages should be contained by bunding and carefully transferred into a sealable impervious container. Remnants from large spillages and small spillages should be absorbed in sand and transferred into sealable impervious container. These containers to be labelled and held for disposal as Section 13

#### 6.4 Reference to Other Sections

Refer to Sections 8, 12 and 13 of the MSDS

### 7. Handling and Storage

#### 7.1 Precautions for Safe Handling

- a. Safe handling      Avoid direct contact with the material. Ensure there is sufficient ventilation of the area. Do not handle in a confined space without forced ventilation, venting safely away from access to other parties. Avoid the formation or spread of mist in the air  
    Do not eat, drink or smoke when handling. Wash hands after using the material
- b. Prevention of handling incompatible substances or mixtures  
    Do not handle other substances or mixtures at the same time. Keep away from other substances and mixtures
- c. Operations and conditions that could create new risks

Do not allow opened, part used or the container in use to come into contact with other materials including the Part A container and all surfaces around. Ensure the containers are tightly sealed during transport and storage in vehicles. Ensure the containers are placed to not fall over in storage and in transport to / from vans and in vans

d. Reduce risk of release to the environment

Ensure the floor at storage, transport and the work location will not allow access to drains or water courses. Lay heavy gauge plastic sheeting or similarly impervious protective covering. Contain and clean up spillage as Section 6.1 of the MSDS

### 7.2 Conditions for Safe Storage, Including Any Incompatibilities

a. Storage conditions

Store in a cool, well ventilated area. Must only be stored in original containers. Keep container tightly closed including part used containers. The floor of the storage area to be impermeable to prevent the escape of spillage / liquids

b. Control of the effects of weather, ambient pressure, temperature, sunlight, humidity and vibration

Ensure opened containers are tightly sealed against vibration spillage during transport when loading / unloading vehicles, during transport and moving from vehicle to the work location. Unopened containers to be protected against damage during the same movements

c. Storage with other substances and mixtures

Store in the original packaging. Store against falling / touching other materials and in an allocated location

d. Storage room design, quantity limits, ventilation and packaging compatibilities

Storage room to be dry, cool, well ventilated, and constructed to have impermeable floors and walls to prevent the escape of spillages into the environment

e. Other considerations

Use of the stock must be by manufacturing date or expiry date rotation. Containers past their expiry date must be removed for disposal according to Section 13 of the MSDS. No other data available

### 7.3 Specific End Use(es)

Base component of a two-component, solvent free, epoxy resin based floor coating

## 8. Exposure Controls / Personal Protection

### 8.1 Control Parameters

Workplace Exposure Limits (WEL)

Taken from the HSE EH40 Table: no limit stated = not on EH40  
If no 15 min STEL use 3x TWA

Comments Key

Carc: Capable of causing cancer and / or heritable genetic damage

Sen: Capable of causing occupational asthma

Sk: Can be absorbed through the skin, assigned here to substances for which there are concerns that dermal absorption will lead to systematic toxicity

Substance	Long-term exposure limit (8hr TWA reference period)		Short-term exposure limit (15 minute reference period)		Comments
	ppm	mg / m <sup>3</sup>	ppm	mg / m <sup>3</sup>	
Barium sulphate - Inhalable dust - Respirable dust	- -	10 4	- -	30 12	The Carc, Sen and Sk notations are not exhaustive. Notations have been applied to substances identified in IOELV Directives  N/A

Silica, respirable crystalline	-	0.1	-	0.3	N/A
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**WEL - Installer of 701-HB**

701-HB Part A is a liquid with its ingredient substances consumed into the formulation so the WEL inhalable & respirable dust hazards for the Barium Sulphate and Silica constituents do not apply providing the application instructions are followed

**WEL - Subsequent works to the surface**

The WEL hazards DO APPLY for any works to or on the surfaces to which 701-HB has been applied that create 701-HB dust, non-exclusive examples being:

- Grinding, abrading, cutting, etc. of / into the coated surface
- Works on the coated surface that may release these inhalable / respirable dust hazards from the 701-HB coating

**DNEL / PNEC**

Abbreviations: RD = repeated dose  
SLT = Short & Long Term

Substance: Barium sulphate				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (RD)	10 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation (RD)	10 mg/m <sup>3</sup>	General population	Systemic
DNEL	Oral (RD)	13,000 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	115 µg/L	-	-
PNEC	Fresh water sediments	600.4 mg/kg sediment	-	-
PNEC	Soil (agricultural)	207.7 mg/kg soil dw	-	-

Substance: Bisphenol A-(epichlorhydrin)(reaction product)				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (SLT)	12.25 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (SLT)	8.33 mg/kg bw/day	Workers	Systemic
DNEL	Dermal (SLT)	3.571 mg/kg bw/day	General population	Systemic
DNEL	Oral	0.75 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	0.006 mg/L	-	-
PNEC	Marine water	0.0006 mg/L	-	-
PNEC	Fresh water sediments	0.996 mg/kg sediment	-	-
PNEC	Marine sediments	0.0996 mg/kg sediment	-	-
PNEC	Soil (agricultural)	0.196 mg/kg soil dw	-	-

Substance: Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (RD)	29.39 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (RD)	104.15 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (RD)	8.7 mg/m <sup>3</sup>	General population	Systemic
DNEL	Dermal (RD)	62.5 mg/kg bw/day	General population	Systemic
DNEL	Oral (RD)	6.25 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	0.003 mg/L	-	-
PNEC	Marine water	0.0003 mg/L	-	-
PNEC	Fresh water sediments	0.294 mg/kg sediment	-	-
PNEC	Marine sediments	0.0294 mg/kg sediment	-	-
PNEC	Soil (agricultural)	0.237 mg/kg soil dw	-	-

Substance: Oxirane, mono [(C12-14-alkyloxy)methyl] derivatives				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (RD)	3.6 mg/m <sup>3</sup>	Workers	-
DNEL	Dermal (RD)	1 mg/kg bw/day	Workers	-
DNEL	Inhalation (RD)	0.87 mg/m <sup>3</sup>	General population	-
DNEL	Dermal (RD)	0.5 mg/kg bw/day	General population	-
DNEL	Oral (RD)	0.5 mg/kg bw/day	General population	-
PNEC	Fresh water	0.0072 mg/L	-	-
PNEC	Marine water	0.00072 mg/L	-	-
PNEC	Fresh water sediments	307.16 mg/kg sediment	-	-
PNEC	Marine sediments	30.72 mg/kg sediment	-	-
PNEC	Soil (agricultural)	61.42 mg/kg soil dw	-	-

Substance: Benzyl alcohol				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (RD)	22 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation (RD, Acute)	110 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (RD)	8 mg/kg bw/day	Workers	Systemic
DNEL	Dermal (RD, Acute)	40 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (RD)	5.4 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation (RD, Acute)	27 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (RD)	4 mg/kg bw/day	General population	Systemic
DNEL	Dermal (RD, Acute)	20 mg/kg bw/day	General population	Systemic
DNEL	Oral (RD)	4 mg/kg bw/day	General population	Systemic
DNEL	Oral (RD, Acute)	20 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	1 mg/L	-	-
PNEC	Marine water	0.1 mg/L	-	-
PNEC	Fresh water sediments	5.27 mg/kg sediment	-	-
PNEC	Marine sediments	0.527 mg/kg sediment	-	-

## 8.2 Exposure Controls

**8.2.1 Appropriate Engineering Controls** Ensure there is sufficient ventilation in the area, including forced ventilation if necessary or in an enclosed space. Ensure lighting and electrical equipment are not a source of ignition. Ensure all engineering measures mentioned in Section 7 of the MSDS are in place

Isolate the work area with warning signage against unauthorised access. Ensure all other persons are pre-notified of the works and remain clear of the work area

### 8.2.2 Personal Protective Equipment

- a. Eye / face protection Safety glasses with side protection EN166. Ensure eye bath facilities are available
- b. Skin protection
  - (i) Hand Protection To be impermeable and resistant to the product / substance / mixture. Due to missing tests no recommendation to the glove material can be given. Selection of the glove material to be on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves	<p>The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC, this being repealed by EU 2016/425 on 21/04/2018, and the resultant standard EN 374</p> <p>The selection of the suitable gloves does not only depend upon the material, but also further marks of quality and varies from manufacturer to manufacturer</p> <p>Break through, and other characteristics, depending upon material density and the glove type, and must be determined in each case</p> <p>Gloves must be inspected prior to each time used and must be replaced when damaged or worn out</p> <p>Impermeable gloves, alkali-resistant, EN 374</p>
Penetration time of gloves	Breakthrough time of the glove material > 2 hours
(ii) Other	<p>Impermeable protective clothing</p> <p>Good hygiene measures should be followed at all time</p>
c. Respiratory protection	N/A
d. Thermal hazards	NDA
e. Environmental	Refer to specific Member State legislation for requirements under Community environmental legislation

## 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

• Appearance	
(i) Form	Liquid
(ii) Colour	Various
• Odour	Characteristic odour
• Odour threshold	NDA
• pH	NDA
• Melting point/range °C	NDA
• Freezing point/range °C	NDA
• Initial boiling point/range °C	NDA
• Flash point/self-ignition °C	NDA
• Evaporation rate	Negligible
• Flammability (solid, gas)	NDA
• Flammability limits, lower %	NDA
• Flammability limits, upper %	NDA
• Auto flammability °C	NDA
• Decomposition temperature	NDA
• Explosive properties	NDA
• Oxidising properties	Non-oxidising (by EC criteria)
• Vapour pressure	NDA
• Vapour density	NDA
• Relative density	NDA
• Solubility in water	Not miscible
• Partition coefficient n-octanol/water	NDA

- Also soluble in NDA
- Viscosity Non-viscous
- VOC g/l NDA

9.2 Other Information N/A

## 10. Stability and Reactivity

- 10.1 Reactivity** Stable under recommended transport or storage conditions
- 10.2 Chemical Stability** Stable under recommended transport, storage and usage conditions and when protected against the materials or conditions listed below
- 10.3 Possibility of Hazardous Reactions** Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to the materials and conditions listed below
- 10.4 Conditions to Avoid** Heat
- 10.5 Incompatible Materials to Avoid** Strong oxidising agents. Strong acids
- 10.6 Hazardous Decomposition Products** In combustion emits toxic fumes

## 11. Toxicological Information

### 11.1 Information on Toxicological Effects

- Acute toxicity

Hazardous ingredients

Hazardous Ingredient	Test			Result
	Route	Species	Endpoint	
Bisphenol A-(epichlorhydrin) (reaction product)	Oral	Mouse	LD50	15,600 mg/kg
	Oral	Rat	LD50	11,400 mg/kg
	Skin	Rabbit	LD50	>20 ml/kg
Oxirane, mono [(C12-14-alkyloxy)methyl] derivatives	Oral	Rat	LD50	17,100 mg/kg
Benzyl Alcohol	Intravenous	Rat	LD50	53 mg/kg
	Oral	Mouse	LD50	1,360 mg/kg
	Oral	Rat	LD50	1,230 mg/kg

Relevant hazards for product

Hazard	Route	Basis
Skin corrosion / irritation	Dermal Route Migration	Hazardous: calculated
Serious eye damage / irritation	Optical	Hazardous: calculated
Respiratory / skin sensitisation	Dermal Route Migration	Hazardous: calculated

Excluded hazards for product

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	-	Based on available data the classification criteria is not met
Acute toxicity (ac. tox. 3)	-	Based on available data the classification criteria is not met
Acute toxicity (ac. tox. 2)	-	Based on available data the classification criteria is not met
Acute toxicity (ac. tox. 1)	-	Based on available data the classification criteria is not met
Germ cell mutagenicity	-	Based on available data the classification criteria is not met



Carcinogenicity	-	Based on available data the classification criteria is not met
Reproductive toxicity	-	Based on available data the classification criteria is not met
STOT single exposure	-	Based on available data the classification criteria is not met
STOT repeated exposure	-	Based on available data the classification criteria is not met
Aspiration hazard	-	Based on available data the classification criteria is not met

### Symptoms / routes of exposure

- Skin corrosion / irritation  
There may be irritation and redness at the site of contact. There may be redness or whiteness of the skin in the area of exposure. An itchy rash may occur at the site of contact
- Serious eye damage / irritation  
There may be irritation and redness. The eyes may water profusely. There may be serious pain
- Ingestion  
There may be soreness and redness of the mouth and throat. There may be vomiting
- Respiratory or skin sensitisation  
Exposure may cause coughing or wheezing
- Delayed / immediate  
Immediate effects can be expected after short-term exposure. Delayed effects can be expected after long-term exposure
- Other information  
N/A

## 12. Ecological Information

- 12.1 Ecotoxicity  
NDA
- 12.2 Persistence and Biodegradability  
Biodegradable
- 12.3 Bioaccumulative Potential  
No bioaccumulation potential
- 12.4 Mobility in Soil  
Readily absorbed in soil
- 12.5 Results of PBT & vPvT Assessment  
This product is not identified as a PBT/vPvB substance
- 12.6 Other Adverse Effects  
Toxic to aquatic organisms. Toxic to soil organisms

## 13. Disposal Considerations

### 13.1 Waste Treatment Methods

- Recovery operations  
Treat as Section 6: Accidental Release Measures. Recovery is not applicable
- Disposal method for material  
Transfer to a suitable closed container for storage / isolation and arrange for collection by a specialist disposal organisation. The closed containers to be labelled with the contents  
  
Physio-chemical treatment not specified elsewhere here which results in final compounds or mixtures which are discarded by means of any other possible disposal operations (e.g. evaporating, drying, calcination, etc.)
- Disposal of packaging  
Treat the same as disposal of the material, see above
- Waste code number  
701-HB Part A and the mixed product: 08 02 99  
Packaging - metal container with remnants: 15 0110
- Special precautions for the disposal method  
Ensure substances or mixtures are not mixed with other materials and not held in the same outer container with other materials
- NB  
The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

## 14. Transport Information

- 14.1 UN Number  
UN3082

<b>14.2 UN Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-(EPICHLORHYDRIN) {REACTION PRODUCT}); FORMALDEHYDE, OLIGOMERIC REACTION PRODUCTS WITH 1-CHLORO-2,3-EPOXYPROPANE AND PHENOL)
<b>14.3 Transportation Hazard Class(es)</b>	9
<b>14.4 Packing Group</b>	III
<b>14.5 Environmental Hazards</b>	
• Environmentally hazardous	Yes
• Marine pollutant	No
<b>14.6 Special Precautions for User</b>	
• Special precautions	No special precautions
• Tunnel code	E
• Transport category	3
<b>14.7 Transport in Bulk According to:</b>	
(i) Annex II of Marpol	NDA
(ii) the IBC Code	NDA

## 15. Regulatory Information

<b>15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance, Mixture or Article</b>	COMMISSION REGULATION (EU) No 2015/830 of 28/05/2015 amending Regulation (EC) No 1907/2006 and repealing (EU) 453/2010 20 May 2010 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/ EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
• Other regulations, limitations and prohibitive regulations	This product is a Seveso category/named substance in Annex I of Council Directive 96/82/EC
<b>15.2 Chemical Safety Assessment</b>	A chemical safety assessment has not been carried out for the substance or the mixture by the supplier

## 16. Other Information

<b>Other Information</b>	This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship
<b>Phrases Used in Sections 2 &amp; 3</b>	H302: Harmful if swallowed H315: Causes skin irritation H317: May cause an allergic skin reaction H319: Causes serious eye irritation H332: Harmful if inhaled H372: Causes damage to organs H411: Toxic to aquatic life with long lasting effects

### Notice

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process

### Abbreviations & Acronyms

bw: body weight  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 CLP: EU Regulation 1272/2008: Classification, Labelling & packaging of chemical substances  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Level (REACH)  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 HSE: (UK) Health & Safety Executive  
 IOELV: Indicative Occupational Exposure Limit Values  
 Irrit.: Irritation  
 LD50: Lethal Dose, 50% affected  
 MSDS: Material Safety Data Sheet  
 N/A: Not Applicable  
 NDA: No Data Available  
 PBT: Persistent, Bioaccumulative and Toxic substances  
 vPvB: Very Persistent and very Bioaccumulative substances  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals: Regulation (EC) No 1907/2006  
 Sens.: Sensitisation  
 STEL: Short Term Exposure Limit  
 STOT RE: Specific target organ toxicity (from) repeated exposure  
 Tox.: Toxicity  
 TWA: Time Weighted Averages

### Changes Compared to the Previous Version

Date	Replaces	Sections	Item	Change	Comment
03/04/19	Rev 2.0	8.1	PNEC	missing unit of measure element in Part A added: mg/ <sup>3</sup> now mg/m <sup>3</sup>	Part B Rev. Nbr. also updated to align with pART a Rev. Nbr.

# System 700 NEWTON 701-HB (Part B) High Build Epoxy Floor Coating



Rev 2.1 - 03 April 2019

PRODUCT CODE - 701-HB

## 1. Identification of the Substance/Mixture and of the Company/Undertaking

### Product Identifier

- Product name: Newton 701-HB (Part B)
- Product code: 701-HB

### Relevant identified uses of the substance and uses advised against

- Use of substance/mixture: IPC1: Adhesives, sealants  
PC9a: Coatings and paints, thinners, paint removers

### Details of the Supplier of the Material Safety Data Sheet

- Company Address: Newton Waterproofing Systems, Newton House, 17-20 Sovereign Way, Tonbridge, Kent TN9 1RH
- Web: www.newtonwaterproofing.co.uk
- Email address of the competent person: info@newtonwaterproofing.co.uk
- Emergency telephone number: +44 (0)1732 360095: 08:00/17:30 (GMT) Mon-Thur & 08:00/17:00 (GMT) Fri



## 2. Hazard Identification

- Refer to Section 16 for: The explanation of the abbreviations used throughout this MSDS  
The full list of Hazard Phrases stated throughout this MSDS

### 2.1 Classification of the Substance or Mixture Product Identifier

- Classification under CLP: Acute Tox. 4: H302; Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Corr. 1B: H314; Skin Sens. 1: H317
- Most important adverse effects: Harmful if swallowed. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Causes serious eye damage. Harmful to aquatic life with long lasting effects

### 2.2 Label Elements

- Hazard statements: H302: Harmful if swallowed  
H314: Causes severe skin burns and eye damage  
H317: May cause an allergic skin reaction  
H318: Causes serious eye damage  
H412: Harmful to aquatic life with long lasting effects
- Signal words: Danger
- Hazard pictograms: GHS05 Corrosion  GHS07 Exclamation mark 
- Precautionary statements: P262: Do not get in eyes, on skin, or on clothing  
P280: Wear protective gloves/protective clothing/eye protection/face protection  
P285: In case of inadequate ventilation wear respiratory protection  
P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P302+350: IF ON SKIN: Gently wash with plenty of soap and water  
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P309+311: If exposed or if you feel unwell: Call a POISON CENTRE / doctor

### 2.3 Other Hazards

- PBT / vPvB This product is not identified as a PBT / vPvB substance
- Other Hazards NDA

## 3. Composition/information on ingredients

### 3.2 Mixture

This product is a mixture

#### Hazardous Substances

Chemical name	CAS	EINECS	REACH Registration Number	Percent	Classification
Benzyl alcohol	100-51-6	202-859-9	01-2119492630-38-####	30-50	Acute Tox. 4: H332 Acute Tox. 4: H302
3-Aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	220-666-8	01-2119514687-32-####	10-20	Acute Tox. 4: H312 Acute Tox. 4: H302 Skin Corr. 1B: H314 Skin Sens. 1: H317 Aquatic Chronic 3: H412
M-phenylenebis(methylamine)	1477-55-0	216-032-5	01-2119480150-50-####	10-20	Acute Tox. 4: H302 Skin Corr. 1B: H314 Skin Sens. 1B: H317 Aquatic Chronic 3: H412 Acute Tox. 4: H332 EUH071
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)	113930-69-1	500-302-7	01-2119965162-39-####	3-10	Skin Corr. 1B: H314 Eye Dam. 1: H318 Skin Sens. 1B: H317 Aquatic Chronic 2: H411
Salicylic acid	69-72-7	200-712-3	01-2119486984-17-####	3-10	Acute Tox. 4: H302 Eye Dam. 1: H318

NB

Please also refer to Section 8 Personal Protection / Exposure Controls

## 4. First Aid Measures

### 4.1 Description of First Aid Measures

- Skin contact** Remove all contaminated clothes and footwear immediately unless stuck to skin. Drench the effected skin with running water for 10 minutes or longer if substance is still on skin. Transfer to hospital if there are burns or symptoms of poisoning
- Eye contact** Bathe the eye with running water for 15 minutes. Transfer to hospital for specialist examination
- Ingestion** Wash out mouth with water. Do not induce vomiting. If unconscious, check for breathing and apply artificial respiration if necessary. If unconscious and breathing is OK, place in the recovery position. Transfer to hospital as soon as possible
- Inhalation** Remove casualty from exposure ensuring one's own safety whilst doing so. If unconscious and breathing is OK, place in recovery position . If conscious, ensure the casualty sits or lays down. If breathing becomes bubbly, have the casualty sit and provide oxygen if available. Transfer to hospital as soon as possible

### 4.2 Most Important Symptoms and Effects, Both Acute and Delayed D

- Skin contact Blistering may occur. Progressive ulceration will occur if treatment is not immediate
- Eye contact Corneal burns may occur. May cause permanent damage. There may be severe pain. The eyes may water profusely. The vision may become blurred. May cause permanent blindness
- Ingestion Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding from the mouth and nose
- Inhalation There may be shortness of breathe with a burning sensation in the throat. Exposure may cause coughing or wheezing
- Delayed / immediate effects Immediate effects can be expected after short-term exposure. Delayed effects can be expected after short-term exposure

### 4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

- Immediate / special treatment Show this safety data sheet to the doctor in attendance. Immediate medical attention is required  
Eye bathing equipment should be available at the work premise

## 5. Fire-Fighting Measures

**5.1 Extinguishing Media** Suitable extinguishing media for the surrounding fire should be used. Use water spray to cool containers. Carbon dioxide. Dry chemical powder

### 5.2 Special Hazards Arising from the Material

Corrosive. In combustion emits toxic fumes

### 5.3 Advice for Firefighters

Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes

## 6. Accidental Release Measures

### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Notify the police and fire brigade immediately

Do not attempt to take action without wearing suitable personal protection, refer to Section 8.2 of the MSDS

Evacuate unnecessary personnel. If outside do not approach from downwind. If outside keep bystanders and passing persons upwind and away from the danger point. Mark out the contaminated area with signage and prevent access by unauthorised persons

Turn leaking containers leak-side up to prevent the escape of material, and place in a leak proof labelled container

### 6.2 Environmental Precautions

Do not discharge into drains or water courses. Contain the spillage using bunding

### 6.3 Methods and Materials for Containment and Cleaning Up

Clean-up should ONLY be dealt with by a qualified person familiar with the specific substance

Large spillages should be contained by bunding and carefully transferred into a sealable impervious container. Remnants from large spillages and small spillages should be absorbed in sand and transferred into sealable impervious container. These containers to be labelled and held for disposal as Section 13

### 6.4 Reference to Other Sections

Refer to Sections 8, 12 and 13 of the MSDS

### 7. Handling and Storage

#### 7.1 Precautions for Safe Handling

- a. Safe handling
 

Avoid direct contact with the material. Ensure there is sufficient ventilation of the area. Do not handle in a confined space without forced ventilation, venting safely away from access to other parties. Avoid the formation or spread of mist in the air

Do not eat, drink or smoke when handling. Wash hands after using the material
- b. Prevention of handling incompatible substances or mixtures
 

Do not handle other substances or mixtures at the same time. Keep away from other substances and mixtures
- c. Operations and conditions that could create new risks
 

Do not allow opened, part used or the container in use to come into contact with other materials including the Part A container and all surfaces around. Ensure the containers are tightly sealed during transport and storage in vehicles. Ensure the containers are placed to not fall over in storage and in transport to / from vans and in vans
- d. Reduce risk of release to the environment
 

Ensure the floor at storage, transport and the work location will not allow access to drains or water courses. Lay heavy gauge plastic sheeting or similarly impervious protective covering. Contain and clean up spillage as Section 6.1 of the MSDS

#### 7.2 Conditions for Safe Storage, Including Any Incompatibilities

- a. Storage conditions
 

Store in a cool, well ventilated area. Must only be stored in original containers. Keep container tightly closed including part used containers. The floor of the storage area to be impermeable to prevent the escape of spillage / liquids
- b. Control of the effects of weather, ambient pressure, temperature, sunlight, humidity and vibration
 

Ensure opened containers are tightly sealed against vibration spillage during transport when loading / unloading vehicles, during transport and moving from vehicle to the work location. Unopened containers to be protected against damage during the same movements
- c. Storage with other substances and mixtures
 

Store in the original packaging. Store against falling / touching other materials and in an allocated location
- d. Storage room design, quantity limits, ventilation and packaging compatibilities
 

Storage room to be dry, cool, well ventilated, and constructed to have impermeable floors and walls to prevent the escape of spillages into the environment
- e. Other considerations
 

Use of the stock must be by manufacturing date or expiry date rotation. Containers past their expiry date must be removed for disposal according to Section 13 of the MSDS. No other data available

#### 7.3 Specific End Use(es)

Hardener component of a two-component, solvent free, epoxy resin based floor coating

### 8. Personal Protection/Exposure Control

#### 8.1 Control Parameters

Workplace Exposure Limits (WEL)      NDA, the constituent substances are not on HSE EH40 WEL Table.

### DNEL / PNEC

Substance: Benzyl Alcohol				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	22 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation (repeated dose, Acute)	110 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (repeated dose)	8 mg/kg bw/day	Workers	Systemic
DNEL	Dermal (repeated dose, Accute)	40 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (repeated dose)	5.4 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Inhalation (repeated dose, Acute)	27 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (repeated dose)	4 mg/kg bw/day	General Population	Systemic
DNEL	Dermal (repeated dose, Acute)	20 mg/kg bw/day	General Population	Systemic
DNEL	Oral (repeated dose)	4 mg/kg bw/day	General Population	Systemic
DNEL	Oral (repeated dose, Acute)	20 mg/kg bw/day	General Population	Systemic
PNEC	Fresh water	1 mg/L	-	-
PNEC	Marine water	0.1 mg/L	-	-
PNEC	Fresh water sediments	5.27 mg/kg sediment	-	-
PNEC	Marine sediments	0.527 mg/kg sediment	-	-

Substance: 3-aminomethyl-3,5,5-trimethylcyclohexylamine				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation	0.073 mg/m <sup>3</sup>	Workers	Local
DNEL	Oral (repeated dose)	0.526 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	0.06mg/L	-	-
PNEC	Marine water	0.006 mg/L	-	-
PNEC	Fresh water sediments	5.784 mg/kg sediment	-	-
PNEC	Marine sediments	0.578 mg/kg sediment	-	-
PNEC	Soil (agricultural)	4 mg/kg bw/day	-	-

Substance: M-phenylenebis(methylamine)				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	1.2 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (developmental tox)	0.33 mg/kg bw/day	General population	Systemic
PNEC	Fresh water	0.094 mg/L	-	-
PNEC	Marine water	0.0094 mg/L	-	-
PNEC	Fresh water sediments	0.43 mg/kg sediment	-	-
PNEC	Marine sediments	0.045 mg/kg soil dw	-	-

Substance: 4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenylenebis(methylamine)				
Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	3.27 mg/m <sup>3</sup>	Workers	Systemic
DNEL	Dermal (repeated dose)	0.47 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (repeated dose)	0.58 mg/m <sup>3</sup>	General population	Systemic
DNEL	Dermal (repeated dose)	0.167 mg/kg bw/day	General population	Systemic
DNEL	Oral (repeated dose)	0.167 mg/kg bw/day	General population	Systemic
(continued)				



PNEC	Fresh water	0.001 mg/L	-	-
PNEC	Fresh water sediments	0.007 mg/kg sediment	-	-
PNEC	Marine sediments	0.001 mg/kg sediment	-	-
PNEC	Soil (agricultural)	0.001 mg/kg soil dw	-	-

### Substance: Salicylic acid

Type	Exposure	Value	Population	Effect
DNEL	Inhalation (repeated dose)	5 mg/m <sup>3</sup>	Workers	Local
DNEL	Dermal (repeated dose)	2.3 mg/kg bw/day	Workers	Systemic
DNEL	Inhalation (repeated dose)	4 mg/m <sup>3</sup>	General population	Systemic
DNEL	Dermal (repeated dose)	1 mg/kg bw/day	General Population	Systemic
DNEL	Oral (repeated dose)	1 mg/kg bw/day	General Population	Systemic
PNEC	Fresh water	0.2 mg/L	-	-
PNEC	Marine water	0.02 mg/L	-	-
PNEC	Fresh water sediments	1.42 mg/kg sediment	-	-
PNEC	Marine sediments	0.142 mg/kg sediment	-	-
PNEC	Soil (agricultural)	0.166 mg/kg soil dw	-	-

### 8.2 Exposure Controls

**8.2.1 Appropriate Engineering Controls** Ensure there is sufficient ventilation in the area, including forced ventilation if necessary or in an enclosed space. Ensure lighting and electrical equipment are not a source of ignition. Ensure all engineering measures mentioned in Section 7 of the MSDS are in place

Isolate the work area with warning signage against unauthorised access. Ensure all other persons are pre-notified of the works and remain clear of the work area

### 8.2.2 Personal Protective Equipment

**a. Eye / face protection**

Tightly fitting safety goggles EN166. Ensure eye bath facilities are available

**b. Skin protection**

**(i) Hand Protection**

To be impermeable and resistant to the product / substance / mixture. Due to missing tests no recommendation to the glove material can be given. Selection of the glove material to be on consideration of the penetration times, rates of diffusion and the degradation

**Material of gloves**

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC, this being repealed by EU 2016/425 on 21/04/2018, and the resultant standard EN 374

The selection of the suitable gloves does not only depend upon the material, but also further marks of quality and varies from manufacturer to manufacturer

Break through, and other characteristics, depending upon material density and the glove type, and must be determined in each case

Gloves must be inspected prior to each time used and must be replaced when damaged or worn out

Impermeable gloves, solvent-resistant, EN 374

**Penetration time of gloves**

Breakthrough time of the glove material > 2 hours

**(ii) Other**

Impermeable protective clothing

Good hygiene measures should be followed at all time

**c. Respiratory protection**

N/A

- |                    |   |
|--------------------|---|
| d. Thermal hazards | NDA   |
| e. Environmental   | Refer to specific Member State legislation for requirements under Community environmental legislation |

## 9. Physical and Chemical Properties

### 9.1 Information on Basic Physical and Chemical Properties

- |   |                                |
|---|--------------------------------|
| • Appearance                            |                                |
| (i) Form                                | Liquid                         |
| (ii) Colour                             | Pale yellow                    |
| • Odour                                 | Characteristic odour           |
| • Odour threshold                       | NDA                            |
| • pH                                    | NDA                            |
| • Melting point/range °C                | NDA                            |
| • Freezing point/range °C               | NDA                            |
| • Initial boiling point/range °C        | NDA                            |
| • Flash point/self-ignition °C          | NDA                            |
| • Evaporation rate                      | Slow                           |
| • Flammability (solid, gas)             | NDA                            |
| • Flammability limits, lower %          | 1.2                            |
| • Flammability limits, upper %          | 13                             |
| • Auto flammability °C                  | 380                            |
| • Decomposition temperature             | NDA                            |
| • Explosive properties                  | NDA                            |
| • Oxidising properties                  | Non-oxidising (by EC criteria) |
| • Vapour pressure                       | NDA                            |
| • Vapour density                        | NDA                            |
| • Relative density                      | 1.060                          |
| • Solubility in water                   | Not miscible                   |
| • Partition coefficient n-octanol/water | NDA                            |
| • Also soluble in                       | NDA                            |
| • Viscosity                             | Non-viscous                    |
| • Kinematic viscosity                   | 200 mPa.s                      |
| • VOC g/l                               | NDA                            |

### 9.2 Other Information

N/A

## 10. Stability and Reactivity

- |  |   |
|--|---|
| <b>10.1 Reactivity</b>                         | Stable under recommended transport or storage conditions  |
| <b>10.2 Chemical Stability</b>                 | Stable under recommended transport, storage and usage conditions and when protected against the materials or conditions listed below                              |
| <b>10.3 Possibility of Hazardous Reactions</b> | Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to the materials and conditions listed below |
| <b>10.4 Conditions to Avoid</b>                | Heat  |

**10.5 Incompatible Materials to Avoid** Strong oxidising agents. Strong acids

**10.6 Hazardous Decomposition Products** In combustion emits toxic fumes

## 11. Toxicological Information

### 11.1 Information on Toxicological Effects

- Acute toxicity

Hazardous ingredients

Hazardous Ingredient	Test			Result
Benzyl Alcohol	Intravenous	Rat	LD50	53 mg/kg
	Oral	Mouse	LD50	1,360 mg/kg
	Oral	Rat	LD50	1,230 ml/kg

Relevant hazards for product

Hazard	Route	Basis
Acute toxicity (Acute Tox, 4)	ING	Hazardous: calculated
Skin corrosion / irritation	Dermal Route Migration	Hazardous: calculated
Serious eye damage / irritation	Optical	Hazardous: calculated
Respiratory / skin sensitisation	Dermal Route Migration	Hazardous: calculated

Excluded hazards for product

Hazard	Route	Basis
Acute toxicity (ac. tox. 3)	-	Based on available data the classification criteria is not met
Acute toxicity (ac. tox. 2)	-	Based on available data the classification criteria is not met
Acute toxicity (ac. tox. 1)	-	Based on available data the classification criteria is not met
Germ cell mutagenicity	-	Based on available data the classification criteria is not met
Carcinogenicity	-	Based on available data the classification criteria is not met
Reproductive toxicity	-	Based on available data the classification criteria is not met
STOT single exposure	-	Based on available data the classification criteria is not met
STOT repeated exposure	-	Based on available data the classification criteria is not met
Aspiration hazard	-	Based on available data the classification criteria is not met

Symptoms / routes of exposure

- Skin corrosion / irritation** Blistering may occur. Progressive ulceration will occur if treatment is not immediate
- Serious eye damage / irritation** Corneal burns may occur. May cause permanent damage. There may be severe pain. The eyes may water profusely. The vision may become blurred. May cause permanent blindness
- Ingestion** Corrosive burns may appear around the lips. Blood may be vomited. There may be bleeding of the mouth or nose
- Respiratory or skin sensitisation** There may be shortness of breathe with a burning sensation in the throat. Exposure may cause coughing or wheezing
- Delayed / immediate** Immediate effects can be expected after short-term exposure. Delayed effects can be expected after short-term exposure
- Other information** N/A

### 12. Ecological Information

#### 2.1 Ecotoxicity

Hazardous ingredients	Test		Results
M-phenylenebis(methylamine)	Daphnia magna	48H EC50	15.2 mg/l
	Green alga (Selenastrum capricornutum)	72H ErC50	20.3 mg/l
	Orycias Latipes	96H LC50	87.6 mg/l

- 12.2 Persistence and Biodegradability** Biodegradable
- 12.3 Bioaccumulative Potential** No bioaccumulation potential
- 12.4 Mobility in Soil** Readily absorbed in soil
- 12.5 Results of PBT & vPvT Assessment** This product is not identified as a PBT/vPvB substance
- 12.6 Other Adverse Effects** Negligible ecotoxicity

### 13. Disposal Considerations

#### 13.1 Waste Treatment Methods

- Recovery operations: Treat as Section 6: Accidental Release Measures. Recovery is not applicable
- Disposal method for material: Transfer to a suitable closed container for storage / isolation and arrange for collection by a specialist disposal organisation. The closed containers to be labelled with the contents  
  
Physico-chemical treatment not specified elsewhere here which results in final compounds or mixtures which are discarded by means of any other possible disposal operations (e.g. evaporatin, drying, calcinatin, etc.)
- Disposal of packaging: Treat the same as disposal of the material, see above
- Waste code number: 701-HB Part B and the mixed product: 08 02 99  
Packaging - metal container with remnants: 15 0110
- Special precautions for the disposal method: Ensure substances or mixtures are not mixed with other materials and not held in the same outer container with other materials
- NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal

### 14. Transport Information

- 14.1 UN Number** UN2735
- 14.2 UN Proper Shipping Name** Amines, liquid, corrosive, N.O.S  
4,4'-isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, reaction products with m-phenlenebis(methylamine)
- 14.3 Transportation Hazard Class(es)** 8
- 14.4 Packing Group** II
- 14.5 Environmental Hazards**
- Environmentally hazardous: No
  - Marine pollutant: No
- 14.6 Special Precautions for User**
- Special precautions: No special precautions
  - Tunnel code: E
  - Transport category: 2

### 14.7 Transport in Bulk According to:

- |                        |     |
|------------------------|-----|
| (i) Annex II of Marpol | NDA |
| (ii) the IBC Code      | NDA |

## 15. Regulatory Information

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance, Mixture or Article

COMMISSION REGULATION (EU) No 2015/830 of 28/05/2015 amending Regulation (EC) No 1907/2006 and repealing (EU) 453/2010 20 May 2010 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/ EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC

- Other regulations, limitations and prohibitive regulations

N/A

### 15.2 Chemical Safety Assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier

## 16. Other Information

### Other Information

This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship

### Phrases Used in Sections 2 & 3

EUH071: Corrosive to the respiratory tract  
 H302: Harmful if swallowed  
 H312: Harmful in contact with skin  
 H314: Causes severe skin burns and eye damage  
 H317: May cause an allergic skin reaction  
 H318: Causes serious eye damage  
 H332: Harmful if inhaled  
 H411: Toxic to aquatic life with long lasting effects  
 H412: Harmful to aquatic life with long lasting effects

### Notice

The above mentioned data correspond to our present state of knowledge and experience. The safety data sheet serves as description of the products in regard to necessary safety measures. The indications have not the meaning of guarantees on properties. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process

### Abbreviations & Acronyms

bw: body weight  
 dw: dry weight  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 CLP: EU Regulation 1272/2008: Classification, Labelling & packaging of chemical substances  
 Corr.: Corrosive  
 Dam.: Damage  
 DNEL: Derived No-Effect Level (REACH)  
 PNEC: Predicted No-Effect Level (REACH)  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 (continued)

HSE: (UK) Health & Safety Executive

MSDS: Material Safety Data Sheet

N/A: Not Applicable

NDA: No Data Available

PBT: Persistent, Bioaccumulative and Toxic substances

vPvB: Very Persistent and very Bioaccumulative substances

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals:  
Regulation (EC) No 1907/2006

Sens.: Sensitisation

Tox.: Toxicity

96H LC50: Lethal Exposure, 50% affected after 96 hours

48H EC50 / 72H ErC50: Tests to determine substance concentrations  
(H = hours) resulting 50% reduction in growth rate of the test  
organism, e.g. aquatic algae or daphnia etc.

### Changes Compared to the Previous Version

Date	Replaces	Sections	Item	Change	Comment
03/04/19	Rev 2.0	Part A, 8.1	PNEC	missing unit of measure element in Part A added: mg/ <sup>3</sup> now mg/m <sup>3</sup>	Part B Rev. Nbr. updated to align with pART a Rev. Nbr.  No change to Part B.