



## SAFETY DATA SHEET

### VERSATHANE BRUSH GRADE HARDENER

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1 Product identifier

Product Name VERSATHANE BRUSH GRADE HARDENER  
CAS No. Not applicable.  
EC No. Not applicable.  
REACH Registration No. Not known.

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

Identified Use(s) Refer to product data sheet  
Uses Advised Against For professional use only

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

Manufacturer  
Company Identification Advanced Barrier Coatings Limited  
Address of Manufacturer Commissioners Quay  
Quay Road  
Blyth  
Northumberland  
Postal code NE24 3AG  
Telephone: +44 (0) 1670 338414  
Fax Not known.  
E-mail info@advancedbarriercoatings.com  
Office hours

Supplier  
Company Identification Advanced Barrier Coatings Limited  
Address of Supplier Commissioners Quay  
Quay Road  
Blyth  
Northumberland  
Postal code NE24 3AG  
Telephone: +44 (0) 1670 338414  
Fax Not known.  
E-mail info@advancedbarriercoatings.com  
Office hours

##### 1.4 Emergency telephone number

Emergency Phone No. +44 (0) 1670 338414  
Contact No information available.

National response center  
Address NHS Direct  
Emergency Phone No. +44 111

#### SECTION 2: HAZARDS IDENTIFICATION

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

Regulation (EC) No. 1272/2008 (CLP) Skin Irrit. 2 :Causes skin irritation.  
Skin Sens. 1 :May cause an allergic skin reaction.



Eye Irrit. 2 :Causes serious eye irritation.  
 Acute Tox. 4 :Harmful if inhaled.  
 Resp. Sens. 1 :May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 STOT SE 3 :May cause respiratory irritation.  
 Carc. 2 :Suspected of causing cancer.  
 STOT RE 2 :May cause damage to organs through prolonged or repeated exposure by inhalation.

## 2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name VERSATHANE BRUSH GRADE HARDENER

Hazard Pictogram(s)



GHS08



GHS07

Signal Word(s)

Danger

Hazard Statement(s)

H315: Causes skin irritation.  
 H317: May cause an allergic skin reaction.  
 H319: Causes serious eye irritation.  
 H332: Harmful if inhaled.  
 H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
 H335: May cause respiratory irritation.  
 H351: Suspected of causing cancer.  
 H373: May cause damage to organs through prolonged or repeated exposure by inhalation.

Precautionary Statement(s)

None.

## 2.3 Other hazards

None known.

## 2.4 Additional Information

For full text of H/P Statements see section 16.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	618-498-9	>=60 - <80	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Acute Tox. 4 H332 STOT SE 3 H335 Carc. 2 H351 STOT RE 2 H373	GHS08 GHS07



Formaldehyde, polymer with aniline and carbonyl dichloride	32055-14-4	500-079-6	>=10 - <20	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Acute Tox. 4 H332 Resp. Sens. 1 H334 STOT SE 3 H335 Carc. 2 H351 STOT RE 2 H373	GHS08 GHS07
4,4'-methylenediphenyl diisocyanate diphenylmethane-4,4'-diisocyanate	101-68-8	202-966-0	>=10 - <20	Skin Irrit. 2 H315 Skin Sens. 1 H317 Eye Irrit. 2 H319 Acute Tox. 4 H332 Resp. Sens. 1 H334 STOT SE 3 H335 Carc. 2 H351 STOT RE 2 H373	GHS08 GHS07

### 3.2 Mixtures

Not applicable.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

Inhalation	Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Skin Contact	Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If eye irritation persists: Get medical advice/attention.
Ingestion	Do not induce vomiting. Get medical attention.

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

Over exposure to vapours of products containing isocyanates entails the risk of concentration dependent irritating effects on eyes, nose, throat and respiratory tract. Delayed appearance of complaints and development of hypersensitivity (difficult breathing, coughing, asthma) are possible. Hypersensitive persons, such as those who suffer from asthma or chronic bronchitis should not be permitted to work with this product.

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

Specific treatment (see Medical Advice on this label). Call a POISON CENTER/doctor if you feel unwell. Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

Suitable Extinguishing media	In case of fire, use water spray, foam, dry powder or CO <sub>2</sub> for extinction.
Unsuitable extinguishing media	Do not use water jet.

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

May decompose in a fire, giving off toxic and irritant vapours.

### 5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained



breathing apparatus.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Provide adequate ventilation. Ensure full personal protection (including respiratory protection) during removal of spillages.,

### 6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

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

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

### 6.4 Reference to other sections

See Also Section 8, 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapour. Wash hands and exposed skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Use personal protective equipment as required.

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

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

Water, Amine, Alcohols .

### 7.3 Specific end use(s)

Refer to product data sheet

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Isocyanates, all (as -NCO) Except methyl isocyanate	101-68-8		0.02		0.07	Sen

Region	Source
EU	EU Occupational Exposure Limits
United Kingdom	UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark	Notes
Sen	Capable of causing occupational asthma.



Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Isocyanates (applies to HDI, IPDI, TDI and MDI)	101-68-8	1 µmol isocyanate-derived diamine/mol creatinine in urine	At the end of the period of exposure			

Remark                      Notes

## 8.2 Exposure controls

8.2.1. Appropriate engineering controls    Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection                      Wear eye protection with side protection (EN166).



Skin protection                      Wear protective clothing and gloves: PVC, butyl or nitrile or natural rubber or latex gloves.



Respiratory protection            Where engineering controls are not fitted or inadequate wear suitable respiratory protective equipment. A suitable mask with filter type A (EN14387 or EN405) may be appropriate. PF200: 200 x Protection Factor



Thermal hazards                      Not applicable.

8.2.3. Environmental Exposure Controls    Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Appearance	Liquid. Colour : Brown.
Odour	Musty/ Earthy
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	5 °C
Initial boiling point and boiling range	>300°C
Flash Point	217.5°C
Evaporation rate	Not known.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	< 0.0001 hPa (25 °C)
Vapour density	Not known.
Density (g/ml)	1.22@ 20°C.
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Insoluble in water. Solubility (Other) : Not known.



Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	> 400 °C
Decomposition Temperature (°C)	Not known.
Viscosity	117.58 cSt.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

None anticipated.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

Alcohols, Water, Amine .

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Not classified.
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Harmful if inhaled.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye irritation.
Skin sensitization data	May cause an allergic skin reaction.
Respiratory sensitization data	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Suspected of causing cancer.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	May cause respiratory irritation.
STOT - repeated exposure	May cause damage to organs through prolonged or repeated exposure by inhalation.
Aspiration hazard	Not classified.

**11.2 Other information**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
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Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

## 12.2 Persistence and Degradation

No information available.

## 12.3 Bioaccumulative potential

No information available.

## 12.4 Mobility in soil

Insoluble in water. The product is predicted to have low mobility in soil.

## 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

## 12.6 Other adverse effects

Not known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of this material and its container as hazardous waste.

### 13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

## SECTION 14: TRANSPORT INFORMATION

Not classified as hazardous for transport.

## SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation

Not listed

REACH: ANNEX XIV list of substances subject to authorisation

Not listed

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

Isocyanic acid, polymethylenepolyphenylene ester (9016-87-9), Formaldehyde, polymer with aniline and carbonyl dichloride (32055-14-4), 4,4'-methylenediphenyl diisocyanate diphenylmethane-4,4'-diisocyanate (101-68-8)

Community Rolling Action Plan (CoRAP)

4,4'-methylenediphenyl diisocyanate (101-68-8)

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants

Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer

Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

Not listed

#### National regulations

Other

Not known.



## 15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

### SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

#### LEGEND

Hazard Pictogram(s)



GHS08



GHS07

Hazard classification

Skin Irrit. 2 : Skin corrosion/irritation, Category 2  
Skin Sens. 1 : Skin sensitization, Category 1  
Eye Irrit. 2 : Serious eye damage/irritation, Category 2  
Acute Tox. 4 : Acute toxicity, Category 4  
Resp. Sens. 1 : Respiratory sensitization, Category 1  
STOT SE 3 : Specific target organ toxicity — single exposure, Category 3  
Carc. 2 : Carcinogenicity, Category 2  
STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2

Hazard Statement(s)

H315: Causes skin irritation.  
H317: May cause an allergic skin reaction.  
H319: Causes serious eye irritation.  
H332: Harmful if inhaled.  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H335: May cause respiratory irritation.  
H351: Suspected of causing cancer.  
H373: May cause damage to organs through prolonged or repeated exposure by inhalation.

Precautionary Statement(s)

P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P260: Do not breathe vapour.  
P261: Avoid breathing vapours.  
P264: Wash hands and exposed skin thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P272: Contaminated work clothing should not be allowed out of the workplace.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P284: In case of inadequate ventilation wear respiratory protection.  
P302+P352: IF ON SKIN: Wash with plenty of water.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.





P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313: IF exposed or concerned: Get medical advice/attention.

P312: Call a POISON CENTER/doctor if you feel unwell.

P314: Get medical advice/attention if you feel unwell.

P321: Specific treatment (see Medical Advice on this label).

P332+P313: If skin irritation occurs: Get medical advice/attention.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P337+P313: If eye irritation persists: Get medical advice/attention.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P362+P364: Take off contaminated clothing and wash it before reuse.

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

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

#### Acronyms

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

vPvB : very Persistent and very Bioaccumulative

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