

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product form : Mixture  
Product name : Flexible FAST Adhesive Part A  
Product code : 310472, 317329

**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 : Water-proof sealant  
Product for industrial use only

**1.2.2. Uses advised against**

No additional information available

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

Carlisle Syntec Europe B.V.  
Bloemendalerweg 25  
1382 KB Weesp  
Netherlands

**1.4. Emergency telephone number**

Emergency number : +44 1865 407 333 – English speaking (24 hours, 7 days)

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Acute Tox. 4 (Inhalation) H332  
Skin Irrit. 2 H315  
Eye Irrit. 2 H319  
Resp. Sens. 1 H334  
Skin Sens. 1 H317  
Carc. 2 H351  
STOT SE 3 H335  
STOT RE 2 H373

Full text of H-statements: see section 16

**Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]**

Carc.Cat.3; R40  
Xn; R20  
Xn; R48/20  
R42  
Xi; R36/37/38  
R43

Full text of R-phrases: see section 16

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

No additional information available

**2.2. Label elements****Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Hazard pictograms (CLP) :



GHS07

GHS08

Signal word (CLP) : Danger

Hazardous ingredients : Diphenylmethane diisocyanate, Modified methane diisocyanate (MDI), Diphenylmethane-4,4'-diisocyanate, 4,4'-Methylenediphenyl diisocyanate, oligomers, Diphenylmethane Diisocyanate,

# Flexible FAST Adhesive Part A

## Safety Data Sheet

according to Regulation (EC) No. 453/2010

Hazard statements (CLP)	: isomers and homologues, o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate, Benzene, 1,1'-methylenebis[isocyanato, homopolymer 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 (respiratory system) through prolonged or repeated exposure (if inhaled)
Precautionary statements (CLP)	: P201 - Obtain special instructions before use P280 - Wear protective gloves/protective clothing/eye protection/face 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

### 2.3. Other hazards

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

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

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Diphenylmethane-4,4'-di-isocyanate	(CAS No.) 101-68-8 (EC No.) 202-966-0 (EC index No.) 615-005-00-9	25 - 60	Carc.Cat.3; R40 Xn; R20 Xn; R48/20 Xi; R36/37/38 R42 R43
Diphenylmethane diisocyanate	(CAS No.) 26447-40-5 (EC No.) 247-714-0 (EC index No.) 615-005-00-9	10 - 30	Carc.Cat.3; R40 Xn; R20 Xn; R48/20 Xi; R36/37/38 R42 R43
Modified methane diisocyanate (MDI)	(CAS No.) 39420-98-9	10 - 30	Xn; R20 Xi; R36/37/38 R42 R43 Xn; R48/20
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate	(CAS No.) 5873-54-1 (EC No.) 227-534-9 (EC index No.) 615-005-00-9	10 - 30	Carc.Cat.3; R40 Xn; R20 Xn; R48/20 Xi; R36/37/38 R42 R43
Benzene, 1,1'-methylenebis[isocyanato, homopolymer	(CAS No.) 39310-05-9	10 - 30	R42
Diphenylmethane Diisocyanate, isomers and homologues	(CAS No.) 9016-87-9 (EC No.) 618-498-9	7 - 13	Carc.Cat.3; R40 Xn; R20 Xn; R48/20 Xi; R36/37/38 R42 R43
4,4'-Methylenediphenyl diisocyanate, oligomers	(CAS No.) 25686-28-6 (EC No.) 500-040-3	3 - 7	Xn; R20 Xi; R36/37/38 Xn; R48/20 R42 R43 Carc.Cat.3; R40

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Diphenylmethane-4,4'-di-isocyanate	(CAS No.) 101-68-8 (EC No.) 202-966-0 (EC index No.) 615-005-00-9	25 - 60	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
Diphenylmethane diisocyanate	(CAS No.) 26447-40-5 (EC No.) 247-714-0 (EC index No.) 615-005-00-9	10 - 30	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
Modified methane diisocyanate (MDI)	(CAS No.) 39420-98-9	10 - 30	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335 STOT RE 2, H373
o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate	(CAS No.) 5873-54-1 (EC No.) 227-534-9 (EC index No.) 615-005-00-9	10 - 30	Carc. 2, H351 Acute Tox. 4 (Inhalation), H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317
Benzene, 1,1'-methylenebis[isocyanato, homopolymer	(CAS No.) 39310-05-9	10 - 30	Resp. Sens. 1, H334
Diphenylmethane Diisocyanate, isomers and homologues	(CAS No.) 9016-87-9 (EC No.) 618-498-9	7 - 13	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373
4,4'-Methylenediphenyl diisocyanate, oligomers	(CAS No.) 25686-28-6 (EC No.) 500-040-3	3 - 7	Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop, obtain medical attention.
- First-aid measures after skin contact : Immediately remove contaminated clothing or footwear. Rinse skin with plenty of water or shower. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Ensure that folded skin of eyelids is thoroughly washed with water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Give 100 - 200 ml of water to drink. Do not give an unconscious person anything to drink. Obtain immediate medical attention.

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

- Symptoms/injuries after inhalation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. Inhalation of vapours may cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation. May cause an allergic skin reaction.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : Ingestion may cause irritation of the gastrointestinal tract.

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

Treat symptomatically.

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according to Regulation (EC) No. 453/2010

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use water jet. Water may be ineffective.

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

- Fire hazard : Not flammable.  
Explosion hazard : Containers may rupture when heated.  
Reactivity in case of fire : Reacts on contact with water releasing carbon dioxide (CO<sub>2</sub>).  
Hazardous decomposition products in case of fire : Fire may produce irritating, corrosive and/or toxic gases. Isocyanates. Nitrogen oxides. Hydrogen cyanide. Carbon monoxide. Carbon dioxide.

#### 5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not allow run-off from fire fighting to enter drains or water courses.  
Protection during firefighting : 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

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel. Ensure adequate ventilation.

##### 6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing and eye or face protection.  
Emergency procedures : Ensure adequate ventilation. Do not breathe vapours. Avoid contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if large amounts of the product enters sewers or public waters.

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

- Methods for cleaning up : Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Transfer to open top containers in a well-ventilated place and neutralize with 10% mixture of ammonium hydroxide in water for 48 hours allowing carbon dioxide to escape.

#### 6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Provide adequate ventilation. Use only outdoors or in a well-ventilated area. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

- Hygiene measures : Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

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

- Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from freezing. Store in dry protected location to prevent any moisture contact.  
Incompatible materials : Moisture. Alcohols. Amines. Acids. Alkalis. Metal compounds. Surface-active agents.  
Storage temperature : 15 - 32 °C

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

Water-proof sealant. Product for industrial use only.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)		
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	0.02 mg/m <sup>3</sup> (as NCO)
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	0.07 mg/m <sup>3</sup> (as NCO)
United Kingdom	Remark (WEL)	Sen

Isocyanates		
United Kingdom	Local name	Isocyanates, all (as -NCO)
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	0.02

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Isocyanates		
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	0.07
United Kingdom	Remark (WEL)	Sen

### 8.2. Exposure controls

Appropriate engineering controls	: Provide adequate ventilation.
Personal protective equipment	: Avoid all unnecessary exposure.
Hand protection	: Wear chemically resistant protective gloves. Standard EN 374 - Protective gloves against chemicals. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.
Eye protection	: Chemical goggles or face shield. Standard EN 166 - Personal eye-protection.
Skin and body protection	: Long sleeved protective clothing. Rubber boots.
Respiratory protection	: An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits.
Thermal hazard protection	: Not required for normal conditions of use.
Environmental exposure controls	: Avoid release to the environment.
Other information	: Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures. Contaminated work clothing should not be allowed out of the workplace.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: Yellow.
Odour	: Slight. Musty, aromatic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: < 0 °C Methylene-diphenyl diisocyanate (MDI)
Freezing point	: No data available
Boiling point	: > 300 °C Decomposes
Flash point	: > 110 °C PMcc (Pensky-Martens Closed Cup test)
Auto-ignition temperature	: > 315 °C
Decomposition temperature	: > 300 °C
Flammability (solid, gas)	: Not applicable
Vapour pressure	: < 0.0001 mm Hg (25°C)
Relative vapour density at 20 °C	: 8.5 (air = 1)
Relative density	: 1.1842 (25°C) (Water = 1)
Solubility	: Reacts with water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 300 mPa·s (25°C)
Explosive properties	: Not explosive.
Oxidising properties	: Not oxidising.
Explosive limits	: No data available

### 9.2. Other information

VOC content	: 0 g/l
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts on contact with water releasing carbon dioxide (CO<sub>2</sub>).

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Reacts on contact with water releasing carbon dioxide (CO<sub>2</sub>).

### 10.4. Conditions to avoid

Extremely high or low temperatures. Avoid prolonged heating above 160°C or storage below 5°C.

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### 10.5. Incompatible materials

Moisture. Alcohols. Amines. Acids. Alkalis. Metal compounds. Surface-active agents.

### 10.6. Hazardous decomposition products

Reacts on contact with water releasing carbon dioxide (CO<sub>2</sub>). Fire may produce irritating, corrosive and/or toxic gases. Isocyanates. Hydrogen cyanide. Nitrogen oxides. Carbon monoxide. Carbon dioxide.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Harmful if inhaled.

#### Diphenylmethane-4,4'-di-isocyanate (101-68-8)

LC50 inhalation rat (mg/l)	368 mg/l/4h
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#### Diphenylmethane diisocyanate (26447-40-5)

LD50 oral rat	> 7400 mg/kg
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LD50 dermal rabbit	> 6200 mg/kg
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LC50 inhalation rat (mg/l)	0.369 mg/l/4h
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#### Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)

LD50 dermal rabbit	> 9400 mg/kg
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LC50 inhalation rat (mg/l)	0.49 mg/l/4h Aerosol
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#### o-(p-isocyanatobenzyl)phenyl isocyanate, diphenylmethane-2,4'-diisocyanate (5873-54-1)

LC50 inhalation rat (mg/l)	0.387 mg/l/4h male
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Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified

Based on available data, the classification criteria are not met

Carcinogenicity : Suspected of causing cancer.

Reproductive toxicity : Not classified

Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) : May cause damage to organs (respiratory system) through prolonged or repeated exposure (if inhaled).

Aspiration hazard : Not classified

Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Causes skin irritation. Allergic skin rash. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Inhalation of vapours may cause respiratory irritation. Ingestion may cause irritation of the gastrointestinal tract.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - water : Not classified.

#### Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)

LC50 fish	> 1000 mg/l 96 h - Danio rerio (zebra fish)
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EC50 Daphnia	> 1000 mg/l 24 h - (Water flea)
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NOEC chronic algae	1640 mg/l 72 h - Desmodesmus subspicatus (green algae)
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### 12.2. Persistence and degradability

#### Flexible FAST Adhesive Part A

Persistence and degradability	Not expected to be readily biodegradable.
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#### Diphenylmethane Diisocyanate, isomers and homologues (9016-87-9)

Biodegradation	0 % 28 d - OECD 302C
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### 12.3. Bioaccumulative potential

#### Flexible FAST Adhesive Part A

Bioaccumulative potential	Not expected to bioaccumulate.
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# Flexible FAST Adhesive Part A

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### 12.4. Mobility in soil

#### Flexible FAST Adhesive Part A

Ecology - soil

Water-reactive.

### 12.5. Results of PBT and vPvB assessment

#### Flexible FAST Adhesive Part A

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. Other adverse effects

: Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose of this material and its container at hazardous or special waste collection point.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Additional information : Handle empty containers with care.

## SECTION 14: Transport information

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

### 14.1. UN number

Not regulated for transport

### 14.2. UN proper shipping name

:

### 14.3. Transport hazard class(es)

Not applicable

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Other information : No supplementary information available.

### 14.6. Special precautions for user

Special transport precautions : No special precautions required.

#### 14.6.1. Overland transport

No additional information available

#### 14.6.2. Transport by sea

No additional information available

#### 14.6.3. Air transport

No additional information available

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

Authorisations and/or restrictions on use (Annex XVII):

3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

Flexible FAST Adhesive Part A

Contains no substance on the REACH candidate list

VOC content : 0 g/l

#### 15.1.2. National regulations

No additional information available

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according to Regulation (EC) No. 453/2010

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Data sources : 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 R-, H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Carc. 2	Carcinogenicity, Category 2
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Resp. Sens. 1	Sensitisation — Respiratory, category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Sensitisation — Skin, category 1
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
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
R20	Harmful by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin
R40	Limited evidence of a carcinogenic effect
R42	May cause sensitization by inhalation
R43	May cause sensitisation by skin contact
R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation
Xi	Irritant
Xn	Harmful

NCEC SDS EU (REACH ANNEX II)

*The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use*