SL-PU ID B-component

Safety Data Sheet

According to Regulation (EU) 2015/830, 2020/878 (REACH Annex II)
Issue date: 23-08-21 Version: 1.0

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

1.1. Product identifier

Product form : Mixture

Product name : SL-PU ID B-component

UFI : AMC0-30D6-H00S-0H76

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

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

Use of the substance/mixture : Coating
Product only to be used in combination with component A.

1.2.2. Uses advised against

No additional information available.

1.3. Details of the supplier of the safety data sheet

Quartzline BV
W.A. Boogaerdtstraat 5
3316 BN Dordrecht - Nederland
T +31 (0)78 6513100 - F +31 (0)78 6177390
info@quartzline.nl - www.quartzline.nl

1.4. Emergency telephone number

Emergency number : +31 (0)78 6513100
This number is serviced during office hours.

Country	Official advisory body	Address	Emergency number	Remark
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA Belfast	0344 892 0111	Only for the purpose of informing medical personnel in cases of acute intoxications

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation, Category 2	H315
Serious eye damage/eye irritation, Category 2	H319
Respiratory sensitisation, Category 1	H334
Skin sensitisation, Category 1	H317
Carcinogenicity, Category 2	H351
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335
Specific target organ toxicity — Repeated exposure, Category 2	H373

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

Adverse physicochemical, human health and environmental effects

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. Harmful if inhaled. May cause respiratory irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

2.2. Label elements

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

Hazard pictograms (CLP) :

GHS07 GHS08

Signal word (CLP) : Danger

Contains : Diphenylmethane diisocyanate, isomers and homologues, 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate, o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate

Hazard statements (CLP)	: 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.
Precautionary statements (CLP)	: P201 - Obtain special instructions before use. P261 - Avoid breathing vapours, mist. P280 - Wear protective gloves, protective clothing, eye protection, face protection. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER, doctor. P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH204 - Contains isocyanates. May produce an allergic reaction.
Extra phrases	: Persons already sensitised to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. As from 24 August 2023 adequate training is required before industrial or professional use.

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. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Diphenylmethane diisocyanate, isomers and homologues (Note C)(Note 2)	CAS-No.: 9016-87-9 EC Index-No.: 615-005-00-9	70 – 90	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
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (Note C)(Note 2)	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-47	10 – 15	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
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate (Note C)(Note 2)	CAS-No.: 5873-54-1 EC-No.: 227-534-9 EC Index-No.: 615-005-00-9 REACH-no: 01-2119480143-45	10 – 15	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

Specific concentration limits		
Name	**Product identifier**	**Specific concentration limits**
Diphenylmethane diisocyanate, isomers and homologues	CAS-No.: 9016-87-9 EC Index-No.: 615-005-00-9	(0,1 ≤C ≤ 100) Resp. Sens. 1, H334 (5 ≤C ≤ 100) Eye Irrit. 2, H319 (5 ≤C ≤ 100) Skin Irrit. 2, H315 (5 ≤C ≤ 100) STOT SE 3, H335

Specific concentration limits		
Name	**Product identifier**	**Specific concentration limits**
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	CAS-No.: 101-68-8 EC-No.: 202-966-0 EC Index-No.: 615-005-00-9 REACH-no: 01-2119457014-47	(0,1 ≤C < 100) Resp. Sens. 1, H334 (5 ≤C < 100) STOT SE 3, H335 (5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) Eye Irrit. 2, H319
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 REACH-no: 01-2119480143-45	(0,1 ≤C < 100) Resp. Sens. 1, H334 (5 ≤C < 100) STOT SE 3, H335 (5 ≤C < 100) Skin Irrit. 2, H315 (5 ≤C < 100) Eye Irrit. 2, H319

Note 2 : The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Note C : Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth out with water. Do not induce vomiting without medical advice. Get medical advice/attention.

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

Symptoms/effects after inhalation : May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : Irritation. May cause an allergic skin reaction.

Symptoms/effects after eye contact : Eye irritation.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Presents no particular fire or explosion hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not breathe vapours, mist. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 8: "Exposure controls/personal protection". Concerning disposal elimination after cleaning, see section 13.

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. Wear personal protective equipment. Do not breathe vapours, mist. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Keep only in the original container in a cool well ventilated place. Keep container closed when not in use.

Incompatible products : Strong acids. Strong bases. Oxidizing agent.

Heat and ignition sources : Keep away from heat and direct sunlight.

7.3. Specific end use(s)
No additional information available.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
8.1.1. National occupational exposure and biological limit values
No additional information available.

8.1.2. Recommended monitoring procedures
No additional information available.

8.1.3. Air contaminants formed
No additional information available.

8.1.4. DNEL and PNEC
No additional information available.

8.1.5. Control banding
No additional information available.

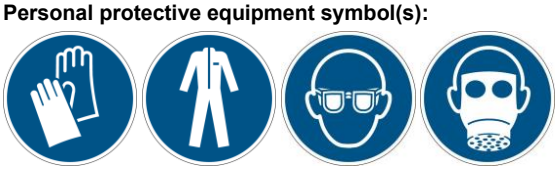
8.2. Exposure controls
8.2.1. Appropriate engineering controls
Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment
Personal protective equipment:

Gloves. protective clothing. Safety glasses. Insufficient ventilation: wear respiratory protection.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection
Eye protection:

Safety glasses. Standard EN 166 - Personal eye-protection - specifications

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing. CEN : EN 340; EN 369; EN 465

Hand protection:

Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent).

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Gloves	butyl rubber, chloroprene rubber (CR)	6 (> 480 minutes)	≥0.5		EN 374
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	≥0.35		EN 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. EN 143

Respiratory protection			
Device	**Filter type**	**Condition**	**Standard**
breathing apparatus with filter	Filter A (brown), Type P3	Vapour protection, Protection for Liquid particles	EN 143

8.2.2.4. Thermal hazards

No additional information available.

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: brown.
Odour	: Odourless.
Odour threshold	: No data available.
pH	: No data available.
Relative evaporation rate (butylacetate=1)	: No data available.
Melting point	: No data available.
Freezing point	: No data available.
Boiling point	: > 300 °C (DIN 53171)
Flash point	: ≈ 229 °C (DIN EN 22719)
Auto-ignition temperature	: No data available.
Decomposition temperature	: No data available.
Flammability (solid, gas)	: No data available.
Vapour pressure	: No data available.
Relative vapour density at 20 °C	: No data available.
Relative density	: No data available.
Density	: ≈ 1,23 g/cm³ (20 °C; DIN 51757)
Solubility	: No data available.
Partition coefficient n-octanol/water (Log Pow)	: No data available.
Viscosity, kinematic	: ≈ 117,886 mm²/s
Viscosity, dynamic	: ≈ 145 mPa·s (20 °C; DIN 53019)
Explosive properties	: No data available.
Oxidising properties	: No data available.

Explosive limits : No data available.

9.2. Other information
No additional information available.

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.
10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).
10.5. Incompatible materials
No additional information available.
10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Harmful if inhaled.

SL-PU ID B-component	
ATE dust/mist	1,5 mg/l/4h

Diphenylmethane diisocyanate, isomers and homologues (9016-87-9)	
ATE gases	4500 ppmv/4h
ATE vapours	11 mg/l/4h
ATE dust/mist	1,5 mg/l/4h

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
ATE gases	4500 ppmv/4h
ATE vapours	11 mg/l/4h
ATE dust/mist	1,5 mg/l/4h

o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate (5873-54-1)	
ATE gases	4500 ppmv/4h
ATE vapours	11 mg/l/4h
ATE dust/mist	1,5 mg/l/4h

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
Carcinogenicity : Suspected of causing cancer.
Reproductive toxicity : Not classified
STOT-single exposure : May cause respiratory irritation.

Diphenylmethane diisocyanate, isomers and homologues (9016-87-9)	
STOT-single exposure	May cause respiratory irritation.

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-single exposure	May cause respiratory irritation.

o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate (5873-54-1)	
STOT-single exposure	May cause respiratory irritation.

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure.

Diphenylmethane diisocyanate, isomers and homologues (9016-87-9)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate (101-68-8)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate (5873-54-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

SL-PU ID B-component	
Viscosity, kinematic	≈ 117,886 mm²/s

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute) : Not classified

Hazardous to the aquatic environment, long-term (chronic) : Not classified

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

SL-PU ID B-component
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

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available.				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Transport in bulk according to Annex II of Marpol 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

EU restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
56.	Diphenylmethane diisocyanate, isomers and homologues ; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate ; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI)
56(a)	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 4,4’-Methylenediphenyl diisocyanate
56(b)	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	Methylenediphenyl diisocyanate (MDI) isomers: 2,4’-Methylenediphenyl diisocyanate
74.	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate ; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

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

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

15.1.2. National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE	Acute Toxicity Estimate
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : ECHA (European Chemicals Agency). according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878.

Other information : REACH Disclaimer:
This information is based on current knowledge. Consistency of data in the SDS with CSR is considered, as far as the information is available at the time of compilation (cfr Revision date and Version number). DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Full text of H- and EUH-statements	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Carc. 2	Carcinogenicity, Category 2
EUH204	Contains isocyanates. May produce an allergic reaction.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
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.
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, 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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]		
Acute Tox. 4 (Inhalation:dust,mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Irrit. 2	H319	Calculation method
Resp. Sens. 1	H334	Calculation method
Skin Sens. 1	H317	Calculation method
Carc. 2	H351	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method

Safety Data Sheet applicable for regions : GB - United Kingdom

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