

SAFETY DATA SHEET
according to
Regulation (EC) No. 1907/2006 & GB REACH UK SI 2020 No. 1577

DGM Reed Diffuser Base

Version 1.0

Print Date 09/08/2023

Revision date / valid from 09/08/2023

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

1.1. Product identifier

Trade name : DGM Reed Diffuser Base
 Substance name : 2-(2-Ethoxyethoxy)ethanol
 CAS-No. : 111-90-0
 EC-No. : 203-919-7
 EU REACH-Reg. No. : 01-2119475105-42-xxxx

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

Use of the Substance/Mixture : Chemical industry in general
 Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : NI Candle Supplies Ltd
 Unit 7A Milltown Industrial Estate, Greenan Road
 Warrenpoint, BT34 3FN
 Contact : Sarah Lowther
 Telephone : +44 28 4177 4362
 E-mai : support@nicandlesupplies.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number:
 +44 7310 159147

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation S.I. 2019/720 (GB CLP)

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

Most important adverse effects

Human Health : See section 11 for toxicological information.
 Physical and chemical hazards : See section 9/10 for physicochemical information.

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Potential environmental effects : See section 12 for environmental information.

2.2. Label elements

Labelling according to Regulation S.I. 2019/720 (GB CLP)

The product is not labeled as dangerous according to Regulation (EC) No. 1272/2008.

Additional Labelling:

Handle in accordance with good industrial hygiene and safety practice.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: No information available about endocrine disruption properties for environment.

Toxicological information: No information available about endocrine disruption properties for human health.

Combustible liquid. If heated above flash point, the vapours may form an explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.1. Substances

Remarks : No dangerous ingredients according to Regulation (EC) No. 1907/2006

Non-hazardous component

| Chemical name | Identification Number | Amount [%] |
|---------------------------|--|------------|
| 2-(2-Ethoxyethoxy)ethanol | CAS-No. : 111-90-0 EC-No. 203-919-7 REACH-Reg. No. 01-2119475105-42-xxxx | <= 100 |

SECTION 4: First aid measures

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4.1. Description of first aid measures

| | |
|------------------------------------|--|
| General advice | : Move out of dangerous area. Take off all contaminated clothing immediately. |
| If inhaled | : Remove to fresh air. If symptoms persist, call a physician. |
| In case of skin contact | : Wash off with soap and water. If skin irritation persists, call a physician. |
| In case of eye contact | : Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist. |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If symptoms persist, call a physician. |
| Protection of First Aid Responders | : First Aid responders should pay attention to self-protection and use the recommended protective clothing. |

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

| | |
|----------|---|
| Symptoms | : See Section 11 for more detailed information on health effects and symptoms. |
| Effects | : May irritate skin. May cause irritation of the mucous membranes. See Section 11 for more detailed information on health effects and symptoms. |

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

| | |
|-----------|--|
| Treatment | : In case of accidental inhalation apply glucocorticoid inhalation spray. Treat symptomatically. |
|-----------|--|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|--------------------------------|--|
| Suitable extinguishing media | : Water spray, foam, dry powder or CO ₂ . |
| Unsuitable extinguishing media | : High volume water jet |

5.2. Special hazards arising from the substance or mixture

| | |
|--------------------------------------|---|
| Specific hazards during firefighting | : Combustible liquid. In case of fire hazardous decomposition products may be produced such as: |
| Hazardous combustion products | : Carbon monoxide, Carbon dioxide (CO ₂) |

5.3. Advice for firefighters

| | |
|--------------------|---|
| Special protective | : In the event of fire, wear self-contained breathing |
|--------------------|---|

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| | |
|----------------------------|---|
| equipment for firefighters | apparatus. Choose protective equipment according to size of fire. |
| Further advice | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Cool closed containers exposed to fire with water spray. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment. Ensure adequate ventilation. Avoid contact with skin and eyes.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If material reaches soil inform authorities responsible for such cases. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Keep in suitable, closed containers for disposal.

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.

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Advice on protection against fire and explosion : Combustible liquid. Keep away from heat and sources of ignition. Normal measures for preventive fire protection.

Further information on storage conditions : Keep tightly closed in a dry and cool place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs.

Suitable packaging materials : Stainless steel, Polypropylene

Unsuitable packaging materials : , Aluminium, Copper

7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) Information : Contains no substances with occupational exposure limit values.

Contains no substances with occupational exposure limit values.

| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|------------|---------------------------|------------------|
|------------|---------------------------|------------------|

Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL
Workers, Long-term - systemic effects, Skin contact : 50 mg/kg bw/day

DNEL
Workers, Long-term - systemic effects, Inhalation : 37 mg/m³

DNEL
Workers, Long-term - local effects, Inhalation : 18 mg/m³

DNEL
Consumers, Long-term - systemic effects, Skin contact : 25 mg/kg bw/day

DNEL
Consumers, Long-term - systemic effects, Inhalation : 18.3 mg/m³

DNEL
Consumers, Long-term - systemic effects, Ingestion : 25 mg/kg bw/day

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DNEL
Consumers, Long-term - local effects, Inhalation : 9 mg/m³

Predicted No Effect Concentration (PNEC)

Fresh water : 0.74 mg/l
Marine water : 0.074 mg/l
Intermittent releases : 10 mg/l
Sewage treatment plant (STP) : 500 mg/l
Fresh water sediment
Related to, dry weight : 2.47 mg/kg
Marine sediment
Related to, dry weight : 0.274 mg/kg
Soil
Related to, dry weight : 0.15 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : Required, if exposure limit is exceeded (e.g. OEL).
Required if vapours or aerosol are released.
Respiratory protection complying with EN 141.
Filter Type : Type A

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.
Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Material : butyl-rubber
Break through time : >= 8 h
Glove thickness : 0.5 mm

Material : Fluorinated rubber

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Break through time : ≥ 8 h
Glove thickness : 0.4 mm

Eye protection

Advice : Safety goggles

Skin and body protection

Advice : Protective work clothing

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If material reaches soil inform authorities responsible for such cases.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form : liquid

Physical state : liquid

Colour : colourless

Odour : mild

Odour Threshold : 1.1 ppm

Melting point/range : -54 °C

Boiling point/boiling range : 196 °C

Flammability (solid, gas) : Product is a liquid, see section 9.2.
Remarks: Flammable liquid with a flash point >60 - ≤ 100 °C.

Upper explosion limit / Upper flammability limit : 23.5 %(V)

Lower explosion limit / Lower flammability limit : 1.2 %(V)

Flash point : 91 °C

Auto-ignition temperature : 204 °C

Decomposition temperature : No data available

Self-Accelerating : No data available

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decomposition temperature
(SADT)

pH : not determined

Viscosity

Viscosity, dynamic : 4.4 mPa.s (20 °C)

Viscosity, kinematic : No data available

Flow time : No data available

Solubility(ies)

Water solubility : completely miscible

Solubility in other solvents : No data available

Dissolution Rate : No data available

Partition coefficient: n-
octanol/water : log Pow: -0.54

Dispersion Stability : No data available

Vapour pressure : 0.17 hPa (20 °C)

Relative density : No data available

Density : 0.99 g/cm³ (20 °C)

Bulk density : No data available

Relative vapour density : No data available

Particle characteristics
No data available

9.2 Other information

Explosives : Formation of explosive air/vapour mixtures is possible.

Oxidizing properties : not oxidising

Flammability (liquids) : Combustible liquid.
Remarks: Flammable liquid with a flash point >60 - <=100 °C.

Evaporation rate : 0.01
(Butyl Acetate = 1)

SECTION 10: Stability and reactivity

10.1. Reactivity

Advice : No decomposition if stored and applied as directed.

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10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : Gives off hydrogen by reaction with metals. Reacts with air to form peroxides. Reacts with: Aluminium Oxidizing agents

10.4. Conditions to avoid

Conditions to avoid : Heat, flames and sparks.
Thermal decomposition : No data available

10.5. Incompatible materials

Materials to avoid : Aluminium, Incompatible with oxidizing agents. Metals, Peroxides, Strong acids and strong bases

10.6. Hazardous decomposition products

Hazardous decomposition products : Fire may cause evolution of: Carbon oxides

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

Data for the product

Irritation

Skin

Result : Causes skin irritation.

Eyes

Result : Splash in the eyes may cause discomfort.

Component: 2-(2-Ethoxyethoxy)ethanol

CAS-No. 111-90-0

Acute toxicity

Oral

LD50 : 6031 mg/kg body weight(Mouse) (OECD Test Guideline 401)

Inhalation

LC0 : 0.025 mg/l (Rat, male and female; 8 h; vapour)

Dermal

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LD50 : 9143 mg/kg (Rabbit, male) (OECD Test Guideline 402)

Irritation

Skin

Result : No skin irritation (Rabbit) (OECD Test Guideline 404)

Eyes

Result : No eye irritation (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result : Study scientifically not justified.

CMR effects

CMR Properties

Carcinogenicity : Animal testing did not show any carcinogenic effects.
Mutagenicity : In vitro tests did not show mutagenic effects
In vivo tests did not show mutagenic effects
Teratogenicity : Causes developmental effects in animals at high doses.
Reproductive toxicity : Animal testing did not show any effects on fertility.

Specific Target Organ Toxicity

Single exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Aspiration hazard

No aspiration toxicity classification,

11.2. Information on other hazards

Data for the product

Endocrine disrupting properties

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Assessment : No information available about endocrine disruption properties for human health.

SECTION 12: Ecological information

12.1. Toxicity

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|-------------------|----------------------------------|-------------------------|

Acute toxicity

Fish

LC50 : 6,010 mg/l (Ictalurus punctatus; 96 h) (flow-through test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 1,982 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202)

algae

EC50 : > 100 mg/l (Desmodesmus subspicatus (green algae); 96 h) (static test; OECD Test Guideline 201)

Bacteria

IC50 : > 5000 mg/l (Bacteria; 16 h) (static test)

12.2. Persistence and degradability

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|-------------------|----------------------------------|-------------------------|

Persistence and degradability

Persistence

Result : No data available

Biodegradability

Result : 79.4 % (activated sludge; Related to: CO₂ formation (% of the theoretical value).; Exposure Time: 12 d)(OECD Test Guideline

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301B) Readily biodegradable.

12.3. Bioaccumulative potential

| | | |
|------------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
| Bioaccumulation | | |

Result : log Kow -0.54
: BCF: < 100; log Pow < 1
Bioaccumulation is not expected.

12.4. Mobility in soil

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
| Mobility | | |

: Highly mobile in soils

12.5. Results of PBT and vPvB assessment

| |
|---|
| Data for the product |
| Results of PBT and vPvB assessment |

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

| | | |
|---|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
| Results of PBT and vPvB assessment | | |

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Endocrine disrupting properties

| | |
|--------------------------------|---|
| Data for the product | |
| Endocrine disrupting potential | : No information available about endocrine disruption properties for environment. |

12.7. Other adverse effects

| | | |
|--|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
| Additional ecological information | | |

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Result : Avoid subsoil penetration.
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services. This product shall be disposed of or recovered in compliance with Directive 2008/98/EC on waste as lastly amended.
- Contaminated packaging : Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning. If recycling is not practicable, dispose of in compliance with local regulations.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

Not dangerous goods for ADR, RID, IMDG and IATA.

14.1. UN number or ID number

|| Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packaging group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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SECTION 15: Regulatory information

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

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|-------------------|----------------------------------|-------------------------|

EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended : ; The substance/mixture does not fall under this legislation.

EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC) : ; Not listed

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|-------------------|----------------------------------|-------------------------|

EU. Regulation No. 1223/2009 on cosmetic products, Annex III: List of Restricted Substances in Cosmetic Products : Reference number: 297; Listed

| | | |
|-------------------|----------------------------------|-------------------------|
| Component: | 2-(2-Ethoxyethoxy)ethanol | CAS-No. 111-90-0 |
|-------------------|----------------------------------|-------------------------|

EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I : ; The substance/mixture does not fall under this legislation.

Germany. Ordinance on Facilities Handling Substances that are Hazardous to Water, ((AwSV of 21 April 2017), UBA, BAnz AT), as amended : WGK 1: slightly hazardous to water: 101

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Notification status

2-(2-Ethoxyethoxy)ethanol:

| Regulatory List | Notification | Notification number |
|-----------------|--------------|---------------------|
| EINECS | YES | 203-919-7 |
| DSL | YES | |
| KECI (KR) | YES | KE-10467 |
| ENCS (JP) | YES | (2)-422 |
| ENCS (JP) | YES | (7)-97 |
| ISHL (JP) | YES | (2)-422 |
| ISHL (JP) | YES | (7)-97 |
| INSQ | YES | |
| IECSC | YES | |
| ONT INV | YES | |
| TCSI | YES | |
| PICCS (PH) | YES | |
| TSCA | YES | |
| VN INVL | YES | |
| TH INV | YES | 2909.44 |
| TH INV | YES | 55-1-00705 |
| AU AIICL | YES | |
| NZIOC | YES | |

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

Abbreviations and Acronyms

| | |
|------------------|---|
| AU AIICL | Australia. Industrial Chemicals Act (AIC) List |
| BCF | bioconcentration factor |
| BOD | biochemical oxygen demand |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| CMR | carcinogenic, mutagenic or toxic to reproduction |
| COD | chemical oxygen demand |
| DNEL | derived no-effect level |
| DSL | Canada. Environmental Protection Act, Domestic Substances List |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| ENCS (JP) | Japan. Kashin-Hou Law List |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| IECSC | China. Inventory of Existing Chemical Substances |
| INSQ | Mexico. National Inventory of Chemical Substances |

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| | |
|-------------------------------|---|
| ISHL (JP) | Japan. Inventory of Industrial Safety & Health |
| KECI (KR) | Korea. Existing Chemicals Inventory |
| LC50 | median lethal concentration |
| LOAEC | lowest observed adverse effect concentration |
| LOAEL | lowest observed adverse effect level |
| LOEL | lowest observed effect level |
| NDSL | Canada. Environmental Protection Act. Non-Domestic Substances List |
| NLP | no-longer polymer |
| NOAEC | no observed adverse effect concentration |
| NOAEL | no observed adverse effect level |
| NOEC | no observed effect concentration |
| NOEL | no observed effect level |
| NZIOC | New Zealand. Inventory of Chemicals |
| OECD | Organisation for Economic Cooperation and Development |
| OEL | occupational exposure limit |
| ONT INV | Canada. Ontario Inventory List |
| PBT | persistent, bioaccumulative and toxic |
| PHARM (JP) | Japan. Pharmacopoeia Listing |
| PICCS (PH) | Philippines. Inventory of Chemicals and Chemical Substances |
| PNEC | predicted no-effect concentration |
| REACH Auth. No.: | REACH Authorisation Number |
| REACH AuthAppC. No. | REACH Authorisation Application Consultation Number |
| UK REACH Auth. No.: | UK REACH Authorisation Number |
| UK REACH AuthAppC. No. | UK REACH Authorisation Application Consultation Number |
| UK REACH-Reg.No | UK REACH Registration Number |
| STOT | specific target organ toxicity |
| SVHC | substance of very high concern |
| TCSI | Taiwan. Existing Chemicals Inventory |
| TH INV | Thailand. Existing Chemicals Inventory from FDA |
| TSCA | US. Toxic Substances Control Act |
| UVCB | substance of unknown or variable composition, complex reaction products or biological materials |
| VN INVL | Vietnam. National Chemical Inventory |
| vPvB | very persistent and very bioaccumulative |

Further information

Key literature references : Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.

Methods used for : The classification for human health, physical and chemical

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| | | |
|------------------------|---|--|
| product classification | | hazards and environmental hazards were derived from a combination of calculation methods and if available test data. |
| Hints for trainings | : | The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to. |
| Other information | : | <p>The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship.</p> <p>The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.</p> |

|| Indicates updated section.