

# SAFETY DATA SHEET

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

### 1.1. Product identifier

**Trade name**

2K Epoxy Primer 1:1

**Product no.**

4-390-0500

**REACH registration number**

Not applicable

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

**Relevant identified uses of the substance or mixture**

Bodywork protector treatment. Only for professional use.

**Uses advised against**

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The full text of any mentioned and identified use categories are given in section 16

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

**Company and address**

August Handel GmbH  
Heinrich-Hertz-Str. 3b  
DE-14532 Kleinmachnow b. Berlin  
Germany  
Phone: +49 30 217333 00

**Contact person**

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**E-mail**

info@augusthandel.com

**SDS date**

2017-06-21

**SDS Version**

1.0

### 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Flam. Liq. 3; H226  
Asp. Tox. 1; H304  
Skin Irrit. 2; H315  
Skin Sens. 1; H317  
Eye Dam. 1; H318  
STOT SE 3; H335  
STOT RE 2; H373  
Aquatic Chronic 3; H412  
See full text of H-phrases in section 2.2.

### 2.2. Label elements

**Hazard pictogram(s)**

**Signal word**

Danger

**Hazard statement(s)**

Flammable liquid and vapour. (H226)  
 May be fatal if swallowed and enters airways. (H304)  
 Causes skin irritation. (H315)  
 May cause an allergic skin reaction. (H317)  
 Causes serious eye damage. (H318)  
 May cause respiratory irritation. (H335)  
 May cause damage to organs through prolonged or repeated exposure. (H373)  
 Harmful to aquatic life with long lasting effects. (H412)

**Safety statement(s)**

**General** If medical advice is needed, have product container or label at hand. (P101).  
 Keep out of reach of children. (P102).  
**Prevention** Wear protective gloves/protective clothing. (P280).  
**Response** Call a POISON CENTER/doctor if you feel unwell. (P312).  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).  
**Storage** Store locked up. (P405).  
**Disposal** Dispose of contents/container to an approved waste disposal plant. (P501).

**Identity of the substances primarily responsible for the major health hazards**

xylene, 4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane, ethylbenzene, Butan-1-ol

**2.3. Other hazards**

This product contains substances that can cause chemical pneumonia if inhaled. The symptoms of chemical pneumonia may appear after several hours.  
 This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

**Additional labelling**

Do not use in paint spraying equipment.

**Additional warnings**

Tactile warning. If this product is sold in retail, it must be delivered with child-resistant fastening.

**VOC**

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**SECTION 3: Composition/information on ingredients****3.1/3.2. Substances/Mixtures**

NAME:	xylene
IDENTIFICATION NOS.:	CAS-no: 1330-20-7 EC-no: 215-535-7 Index-no: 601-022-00-9
CONTENT:	5-22%%
CLP CLASSIFICATION:	Flam. Liq. 3, Acute Tox. 4, STOT RE 2, STOT SE 3, Skin Irrit. 2, Asp. Tox. 1 H226, H304, H312, H315, H332, H335, H373
NOTE:	SL
NAME:	4,4'-Isopropylidenediphenol, oligomeric reaction products with 1-chloro-2,3-epoxypropane
IDENTIFICATION NOS.:	CAS-no: 25068-38-6 EC-no: 500-033-5 Index-no: 603-074-00-8
CONTENT:	19%%
CLP CLASSIFICATION:	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, Aquatic Chronic 2 H315, H317, H319, H411
NAME:	ethylbenzene
IDENTIFICATION NOS.:	CAS-no: 100-41-4 EC-no: 202-849-4 Index-no: 601-023-00-4
CONTENT:	0.4-6%%
CLP CLASSIFICATION:	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1 H225, H304, H332, H373
NOTE:	SL
NAME:	Butan-1-ol
IDENTIFICATION NOS.:	CAS-no: 71-36-3 EC-no: 200-751-6 Index-no: 603-004-00-6
CONTENT:	3-4%%
CLP CLASSIFICATION:	Flam. Liq. 3, Acute Tox. 4, STOT SE 3, Skin Irrit. 2, Eye Dam. 1 H226, H302, H315, H318, H335, H336
NOTE:	S

(\*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.  
S = Organic solvent L = European occupational exposure limit.

#### Other information

ATEmix(inhale, vapour) > 20  
ATEmix(dermal) > 2000  
ATEmix(oral) > 2000  
Eye Cat. 1 Sum =  $\sum(Ci/S(G)CLi) = 1,0664 - 1,5996$   
Skin Cat. 2 Sum =  $\sum(Ci/S(G)CLi) = 4,96 - 7,44$   
N chronic (CAT 3) Sum =  $\sum(Ci/(M(\text{chronic})^*25)*0.1*10^{\wedge}CATi) = 6,08 - 9,12$

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Bring the person into fresh air and stay with him.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or thinners.

#### Eye contact

Remove contact lenses. Flush eyes with plenty of water or salt water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Seek medical assistance immediately and continue flushing.

#### Ingestion

Do not induce vomiting! If vomiting occurs, keep head facing down to prevent vomit entering the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should be kept under medical attention for a minimum of 48 hours.

#### Burns

Rinse with water until the pain stops then continue to rinse for a further 30 minutes.

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

This product contains substances that can cause chemical pneumonia if inhaled. The symptoms of chemical pneumonia may appear after several hours.

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

IF exposed or concerned: Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

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

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed

containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

### 5.3. Advice for firefighters

No specific requirements.

## SECTION 6: Accidental release measures

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

Avoid inhalation of vapours from spilled material. Avoid direct contact with spilled substances. Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

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

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools. Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

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

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

#### Storage temperature

Room temperature 18 to 23°C

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### OEL

Butan-1-ol  
 Long-term exposure limit (8-hour TWA reference period): - ppm | - mg/m<sup>3</sup>  
 Short-term exposure limit (15-minute reference period): 50 ppm | 154 mg/m<sup>3</sup>  
 Comments: Sk (Sk = Can be absorbed through skin. )

ethylbenzene  
 Long-term exposure limit (8-hour TWA reference period): 100 ppm | 441 mg/m<sup>3</sup>  
 Short-term exposure limit (15-minute reference period): 125 ppm | 552 mg/m<sup>3</sup>  
 Comments: Sk (Sk = Can be absorbed through skin. )

xylene  
 Long-term exposure limit (8-hour TWA reference period): 50 ppm | 220 mg/m<sup>3</sup>  
 Short-term exposure limit (15-minute reference period): 100 ppm | 441 mg/m<sup>3</sup>  
 Comments: Sk BMGV (Bmgv = Biological Monitoring Guidance Value. Sk = Can be absorbed through skin. )

#### DNEL / PNEC

DNEL (xylene): 180 mg/kg  
 Exposure: Dermal  
 Duration of Exposure: Long term – Systemic effects - Workers

DNEL (xylene): 289 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Short term – Systemic effects - Workers  
DNEL (xylene): 289 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Short term – Local effects - Workers  
DNEL (xylene): 77 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Long term – Systemic effects - Workers  
DNEL (xylene): 77 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Long term – Local effects - Workers  
DNEL ( ethylbenzene ): 180 mg/kg  
Exposure: Dermal  
Duration of Exposure: Long term – Systemic effects - Workers  
DNEL ( ethylbenzene ): 293 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Short term – Local effects - Workers  
DNEL ( ethylbenzene ): 77 mg/m<sup>3</sup>  
Exposure: Inhalation  
Duration of Exposure: Long term – Systemic effects - Workers  
DNEL (Butan-1-ol): 154 mg/m<sup>3</sup>  
Duration of Exposure: Short term  
Remarks: 50 ppm  
PNEC (xylene): 0,327 mg/l  
Exposure: Freshwater  
PNEC (xylene): 12,46 mg/kg  
Exposure: Freshwater sediment  
PNEC (xylene): 2,31 mg/kg  
Exposure: Soil  
PNEC (xylene): 6,58 mg/l  
Exposure: Sewage Treatment Plant  
PNEC ( ethylbenzene ): 0,1 mg/l  
Exposure: Freshwater  
PNEC ( ethylbenzene ): 0,01 mg/l  
Exposure: Marine water  
PNEC ( ethylbenzene ): 0,1 mg/l  
Exposure: Intermittent release  
PNEC ( ethylbenzene ): 13,7 mg/kg  
Exposure: Freshwater sediment  
PNEC ( ethylbenzene ): 1,37 mg/kg  
Exposure: Marine water sediment  
PNEC ( ethylbenzene ): 2,68 mg/kg  
Exposure: Soil  
PNEC ( ethylbenzene ): 9,6 mg/l  
Exposure: Sewage Treatment Plant

## 8.2. Exposure controls

Compliance with the accepted occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Observe general occupational hygiene standards.

### Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

### Measures to avoid environmental exposure

Keep containment materials near the workplace. If possible, collect spillage during work.

### Individual protection measures, such as personal protective equipment

**Generally**

Use only CE marked protective equipment.

**Respiratory Equipment**

Recommended: Combination filter A2P3. Class 2/3. Brown/White

**Skin protection**

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

**Hand protection**

Recommended: Natural rubber (latex )

**Eye protection**

Wear safety glasses with side shields.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Form	Liquid
Colour	Gray
Odour	Solvent
Odour threshold (ppm)	No data available.
pH	No data available.
Viscosity (40°C)	5000-8000 mPas
Density (g/cm <sup>3</sup> )	1,56

**Phase changes**

Melting point (°C)	-25
Boiling point (°C)	124-145
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.

**Data on fire and explosion hazards**

Flash point (°C)	23
Ignition (°C)	No data available.
Auto flammability (°C)	315
Explosion limits (% v/v)	No data available.
Explosive properties	No data available.

**Solubility**

Solubility in water	Insoluble
n-octanol/water coefficient	No data available.

**9.2. Other information**

Solubility in fat (g/L)	No data available.
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**SECTION 10: Stability and reactivity****10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is stable under the conditions, noted in the section "Handling and storage".

**10.3. Possibility of hazardous reactions**

Nothing special

**10.4. Conditions to avoid**

Avoid static electricity. Do not expose to any forms of heat (e.g. solar radiation). May lead to excess pressure.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Substance	Species	Test	Route of exposure	Result
Butan-1-ol	Rat	LD50	Oral	2292 mg/kg
Butan-1-ol	Rabbit	LD50	Dermal	3430 mg/kg
Butan-1-ol	Rat	LC50	Inhalation	17.76 mg/m <sup>3</sup>
ethylbenzene	Rat	LD50	Oral	3500 - 4710 mg/kg
ethylbenzene	Rabbit	LD50	Dermal	17800 mg/kg
ethylbenzene	-	LC50	Inhalation	11 mg/l
4,4'-Isopropylidenediphenol, o...	Rat	LD50	Oral	2000 mg/kg
4,4'-Isopropylidenediphenol, o...	Rat	LD50	Dermal	>2000 mg/kg
xylene	Rat	LD50	Oral	4300 mg/kg
xylene	Rabbit	LD50	Dermal	2000 mg/kg
xylene	Rat	LC50	Inhalation	22,1 mg/m <sup>3</sup>

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye damage.

**Respiratory or skin sensitisation**

May cause an allergic skin reaction.

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**Long term effects**

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

**SECTION 12: Ecological information****12.1. Toxicity**

Substance	Species	Test	Duration	Result
Butan-1-ol	Daphnia	EC50	48h	1328 mg/l
Butan-1-ol	Algae	EC50	72h	8500 mg/l
Butan-1-ol	Crustacean	LC50	96h	1376 mg/l
ethylbenzene	Algae	EC10	30 min	200 mg/l
ethylbenzene	Algae	EC50	24 h	13,4 mg/l
ethylbenzene	Fish	EC50	24 h	7 mg/l
ethylbenzene	Daphnia	EC50	48 h	2,4 mg/l
ethylbenzene	Algae	EC50	72 h	33 mg/L
ethylbenzene	Fish	LC50	96 h	12 mg/L
xylene	Daphnia	EC50	24 h	96 mg/l
xylene	Daphnia	EC50	48 h	>1 - 10 mg/l
xylene	Algae	EC50	72 h	2,2 mg/l
xylene	Fish	LC50	96 h	13,5 mg/l

**12.2. Persistence and degradability**

Substance	Biodegradability	Test	Result
ethylbenzene	Yes	Modified OECD Screening Test	100

**12.3. Bioaccumulative potential**

Substance

Potential bioaccumulation

LogPow

BCF

No data available.

**12.4. Mobility in soil**

ethylbenzene : Log Koc= 2,41 (Moderate mobility potential.).

**12.5. Results of PBT and vPvB assessment**

Contains epoxy compounds. See information supplied by the manufacturer.

**12.6. Other adverse effects**

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms. This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

**SECTION 13: Disposal considerations****13.1. Waste treatment methods**

Product is covered by the regulations on hazardous waste.

**Waste**

EWC code

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**Specific labelling**

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**Contaminated packing**

Contaminated packaging must be disposed of similarly to the product.

**SECTION 14: Transport information****14.1 – 14.4**

This product is within scope of the regulations of transport of dangerous goods.

**ADR/RID**

14.1. UN number 1263

14.2. UN proper shipping name -

14.3. Transport hazard class(es) 3

14.4. Packing group -

Notes -

Tunnel restriction code -

**IMDG**

UN-no. 1263

Proper Shipping Name PAINT

Class 3

PG\* -

EmS F-E,S-E

MP\*\* No

Hazardous constituent -

**IATA/ICAO**

UN-no. 1263

Proper Shipping Name PAINT

Class 3

PG\* -

**14.5. Environmental hazards**

-

**14.6. Special precautions for user**

-

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

(\*) Packing group

(\*\*) Marine pollutant



**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

**Demands for specific education**

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**Additional information****Sources**

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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 (CLP).

EC regulation 1907/2006 (REACH).

**15.2. Chemical safety assessment**

No

**SECTION 16: Other information****Full text of H-phrases as mentioned in section 3**

H225 - Highly flammable liquid and vapour.

H226 - Flammable liquid and vapour.

H302 - Harmful if swallowed.

H304 - May be fatal if swallowed and enters airways.

H312 - Harmful in contact with skin.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H318 - Causes serious eye damage.

H319 - Causes serious eye irritation.

H332 - Harmful if inhaled.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure<sup>a</sup>.

H411 - Toxic to aquatic life with long lasting effects.

**The full text of identified uses as mentioned in section 1**

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**Additional label elements**

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**Other**

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

According to EC-Regulation 2015/830

**C.A.R.FIT**

**The safety data sheet is validated by**

JW

**Date of last essential change  
(First cipher in SDS version)**

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**Date of last minor change  
(Last cipher in SDS version)**

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