

## SAFETY DATA SHEET

### 1. Identification

**Product identifier:** DEGADUR® CP 200

**Chemical name:** reactive resin

#### Other means of identification

**Recommended use:** crosslinking for producing coving resins Roller application or brushing Hand-mixing with intimate contact and only PPE available Wide dispersive indoor use resulting in inclusion into or onto a matrix Wide dispersive outdoor use resulting in inclusion into or onto a matrix

**Recommended restrictions:** None known.

#### Manufacturer/Importer/Distributor Information

Company Name : Röhm GmbH  
Product Stewardship  
Kirschenallee  
64293 Darmstadt

Telephone : +49 6151 18 4076

E-mail : sds-info@roehm.com

#### Manufacturer

##### Emergency telephone number:

24-Hour Health : +49 6241 402 5280 (24h)

Emergency : +49 6131 19 240 (24h)

### 2. Hazard(s) identification

#### According to Hazardous Product Regulations

##### Physical Hazards

Flammable liquids Category 2

##### Health Hazards

Acute toxicity (Oral) Category 4

Skin Corrosion/Irritation Category 2

Skin sensitizer Category 1

Specific Target Organ Toxicity -  
Single Exposure Category 3<sup>1</sup>

##### Target Organs

1. Respiratory tract irritation.

##### Unknown toxicity - Health

Acute toxicity, oral 0 %

Acute toxicity, dermal 0 %

Acute toxicity, inhalation, vapor 0 %

Acute toxicity, inhalation, dust or mist 0 %

## Environmental Hazards

Acute hazards to the aquatic environment Category 3

## Unknown toxicity - Environment

Acute hazards to the aquatic environment < 0,0001 %

Chronic hazards to the aquatic environment < 0,0001 %

## Label Elements

### Hazard Symbol:



**Signal Word:** Danger

**Hazard Statement:** Highly flammable liquid and vapor.  
Harmful if swallowed.  
Causes skin irritation.  
May cause an allergic skin reaction.  
May cause respiratory irritation.  
Harmful to aquatic life.

### Precautionary Statements

**Prevention:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof [electrical/ventilating/lighting/...] equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/eye protection/face protection.

**Response:** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see on this label). IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. In case of fire: Use... to extinguish.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked

up.

**Disposal:**

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards:**

Take precautionary measures against static discharges. The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution. A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

### 3. Composition/information on ingredients

**Chemical name:**

reactive resin

**Mixtures**

reactive resin

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Methyl methacrylate		80-62-6	>=25 - <50%
2-ethylhexyl acrylate		103-11-7	>=20,0 - <30,0%
triethyleneglycol dimethacrylate		109-16-0	>=1,0 - <10,0%
N,N-bis-(2-hydroxypropyl)-p-toluidine		38668-48-3	>=1,0 - <10,0%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

### 4. First-aid measures

**Description of necessary first-aid measures**

**General information:**

Take off all contaminated clothing immediately. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours.

**Inhalation:**

Move subject to fresh air and keep him calm. If feeling unwell seek medical advice.

**Skin Contact:**

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Wash contaminated clothing before reuse. If skin irritation occurs consult a physician.

**Eye contact:**

Rinse thoroughly with plenty of water, also under the eyelids. In case of complaints get medical advice.

**Ingestion:** Do not induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.

**Personal Protection for First-aid Responders:** Wear self-contained breathing apparatus.

### Most important symptoms/effects, acute and delayed

**Symptoms:** Excessive or prolonged exposure can cause the following: Vertigo  
Nausea

**Hazards:** No data available.

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

**Treatment:** Treat symptomatically.

## 5. Fire-fighting measures

**General Fire Hazards:** Vapours are heavier than air and can form an explosive mixture with air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Remove sources of ignition. Also keep emptied containers away from sources of heat and ignition. Keep out unprotected persons. In case of fire, remove the endangered barrels and bring to a safe place, if this can be done safely. Containers exposed to heat (fire) may build up pressure. Cool by splashing with water. Prevent fire extinguishing water from contaminating surface water or the ground water system. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** foam Dry chemical. Carbon dioxide

**Unsuitable extinguishing media:** High volume water jet

**Specific hazards arising from the chemical:** May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition. Closed container may rupture if strongly heated. Vapours may form explosive mixtures with air. Combustible air-vapour mixtures are heavier than the air and spread along the floor. Ignition from a considerable distance is possible.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** Keep away from sources of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Take action to prevent static discharges. Use explosion-proof equipment. In the event of fire, cool the endangered containers with water. Fire fighting must be carried out from a safe distance.

**Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:**

Assure sufficient ventilation. Use personal protective clothing. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Keep away from open flames, hot surfaces and sources of ignition. Vapours can form explosive mixtures with air. Keep out unprotected persons. Avoid spark generation.

**Methods and material for containment and cleaning up:**

Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in accordance with regulations.

**Environmental Precautions:**

Prevent product from getting into drains/surface water/groundwater.

## 7. Handling and storage

**Precautions for safe handling:**

Do not breathe vapors. Avoid contact with skin and eyes. Wash hands before breaks and immediately after handling the product. Safety shower and eye wash fountain should be available. Keep away from sources of ignition - No smoking. Vapors are heavier than air. Flammable liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint. Take action to prevent static discharges. Use explosion-proof equipment. In the event of fire, cool the endangered containers with water. Fire fighting must be carried out from a safe distance. When using do not eat, drink or smoke. Avoid inhalation, ingestion and contact with skin and eyes. Provide sufficient ventilation and exhaust at the workplace. Provide good room ventilation even at ground level (vapours are heavier than air). Keep container tightly closed. Open drum carefully as content may be under pressure. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Wash thoroughly after handling. Supervision in place to check that the risk management measures in place are being used correctly and operation conditions followed. Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Control staff entry to working area. Training for staff on good practice. Recording of any 'near miss' situations. Regular cleaning of equipment and work area. Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour)

**Conditions for safe storage, including any incompatibilities:**

Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat. Protect from the action of light. Protect from direct sunlight. Keep containers tightly closed in a cool, well-ventilated place. Fill the container by approximately 90 % only as oxygen (air) is required for stabilisation. With large storage containers make sure the oxygen (air) supply is sufficient to ensure stability. Keep locked up. Keep only in the original container at a temperature not exceeding 25 °C. Keep away from direct sunlight.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values (03 2016)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (03 2016)
Chemical Identity	Type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values (03 2016)
	STEL	100 ppm	US. ACGIH Threshold Limit Values (03 2016)

#### Biological Limit Values

No biological exposure limits noted for the ingredient(s).

#### Appropriate Engineering Controls

For monitoring procedures refer for instance to "Empfohlene Analysenverfahren für Arbeitsplatzmessungen", Schriftenreihe der Bundesanstalt für Arbeitsschutz and "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health

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

**General information:** No data available.

**Eye/face protection:** tightly fitting goggles

#### Skin Protection

##### Hand Protection:

Material: butyl rubber gloves  
Break-through time: 60 min  
Guideline: EN 374

Additional Information: Gloves should be replaced regularly, especially after extended contact with the product., For each work-place a suitable glove type has to be selected.

##### Other:

On handling of larger quantities: face mask, chemical-resistant boots and apron

#### Respiratory Protection:

Breathing apparatus in case of high concentrations if the limit values like TLV are exceeded, when vapours or aerosols occur Respirator with filter for organic vapour

#### Hygiene measures:

Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream.

## 9. Physical and chemical properties

### Appearance

<b>Physical state:</b>	liquid
<b>Form:</b>	Paste
<b>Color:</b>	Blue
<b>Odor:</b>	Characteristic

<b>Odor Threshold:</b>	No data available.
<b>pH:</b>	Not applicable
<b>Freezing point:</b>	-48 °C
<b>Boiling Point:</b>	100 °C (1.013 hPa)
<b>Flash Point:</b>	10 °C
<b>Evaporation Rate:</b>	No data available.
<b>Flammability (solid, gas):</b>	No data available.
<b>Flammability Limit - Upper (%):</b>	12,5 %(V)
<b>Flammability Limit - Lower (%):</b>	0,8 %(V)
<b>Vapor pressure:</b>	38,7 hPa (20 °C)
<b>Vapor density (air=1):</b>	> 1 20 °C
<b>Density:</b>	1,1 g/cm <sup>3</sup> (20 °C)
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	Immiscible or partly miscible with water
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Autoignition Temperature:</b>	The substance or mixture is not classified as self heating.
<b>Decomposition Temperature:</b>	No decomposition if used as directed.
<b>Kinematic viscosity:</b>	No data available.
<b>Dynamic viscosity:</b>	12.000 mPa.s (20 °C)
<b>Explosive properties:</b>	No data available.
<b>Oxidizing properties:</b>	No data available.
<b>Other information</b>	
<b>Minimum ignition temperature:</b>	245 °C
<b>Self Ignition Temperature:</b>	The substance or mixture is not classified as self heating.

## 10. Stability and reactivity

<b>Reactivity:</b>	No data available.
<b>Chemical Stability:</b>	No decomposition if used as directed.
<b>Possibility of hazardous reactions:</b>	Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions.
<b>Conditions to avoid:</b>	Heat and ignition sources, aging, contamination, oxygen free atmosphere.
<b>Incompatible Materials:</b>	Peroxides, amines, sulfur compounds, heavy metal ions, alkalis, reducing agents and oxidizing agents.
<b>Hazardous Decomposition Products:</b>	None when used as directed.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation:</b>	Relevant route of exposure. Information on effects are given below.
<b>Skin Contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Eye contact:</b>	Relevant route of exposure. Information on effects are given below.
<b>Ingestion:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation:</b>	Headache. Dizziness.
<b>Skin Contact:</b>	Causes skin irritation. May cause allergic skin reaction.
<b>Eye contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	If handled correctly, not a relevant route of exposure. Information on effects are given below.

### Information on toxicological effects

#### Acute toxicity (list all possible routes of exposure)

##### Oral

<b>Product:</b>	Acute toxicity estimate: 1.807 mg/kg
	ATEmix : 1.806,52 mg/kg

##### Dermal

<b>Product:</b>	Acute toxicity estimate: > 5.000 mg/kg
	Not classified for acute toxicity based on available data.

##### Inhalation

<b>Product:</b>	ATEmix: > 50 mg/l Vapour
	Not classified for acute toxicity based on available data.

#### Repeated dose toxicity

<b>Product:</b>	No data available.
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##### Specified substance(s):

Methyl methacrylate	NOAEL (Rat, Inhalation(Vapour) ): 25 ppm NOAEL (Rat, Oral): 2000 ppm
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triethyleneglycol  
dimethacrylate

NOAEL (Rat, Oral): 1.000 mg/kg

## Skin Corrosion/Irritation

**Product:**

Irritating. Properties of components in summary.

## Serious Eye Damage/Eye Irritation

**Product:**

No data available.

## Respiratory or Skin Sensitization

**Product:**

No data available.

### Specified substance(s):

Methyl methacrylate

Local Lymph Node Assay, OECD TG 429 (Mouse): May cause sensitization by skin contact.

2-ethylhexyl acrylate

Skin sensitizer

triethyleneglycol  
dimethacrylate

Local Lymph Node Assay (Mouse): Skin sensitizer

N,N-bis-(2-  
hydroxypropyl)-p-  
toluidine

Not a skin sensitizer.

## Carcinogenicity

**Product:**

Contains no ingredient listed as a carcinogen (>0.1%).

## Germ Cell Mutagenicity

### In vitro

**Product:**

No data available.

### Specified substance(s):

triethyleneglycol  
dimethacrylate

Not classified

N,N-bis-(2-  
hydroxypropyl)-p-toluidine

(OECD TG 471)negative

### In vivo

**Product:**

No data available.

### Specified substance(s):

triethyleneglycol  
dimethacrylate

Not classified

N,N-bis-(2-  
hydroxypropyl)-p-toluidine

Ames test: negative

## Reproductive toxicity

**Product:**

Contains no ingredient listed as toxic to reproduction (>0.1%).

## Specific Target Organ Toxicity - Single Exposure

**Product:**

No data available.

**Specified substance(s):**

Methyl methacrylate	Category 3 with respiratory tract irritation.
2-ethylhexyl acrylate	Category 3 with respiratory tract irritation.
triethyleneglycol dimethacrylate	Not classified
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified

#### Specific Target Organ Toxicity - Repeated Exposure

**Product:** No data available.

**Specified substance(s):**

Methyl methacrylate	Not classified
2-ethylhexyl acrylate	Not classified
triethyleneglycol dimethacrylate	Not classified
N,N-bis-(2-hydroxypropyl)-p-toluidine	Not classified

#### Target Organs

Specific Target Organ Toxicity - Single Exposure: Respiratory tract irritation.

#### Aspiration Hazard

**Product:** No aspiration toxicity classification

**Other effects:** There are no toxicological data available for the product as such. Avoid contact with the skin and eyes and inhalation of the product vapours.

## 12. Ecological information

### Ecotoxicity:

#### Acute hazards to the aquatic environment:

##### Fish

**Product:** No data available.

**Specified substance(s):**

Methyl methacrylate	LC 50 (Oncorhynchus mykiss (rainbow trout), 96 h): > 79 mg/l NOEC (Danio rerio (zebra fish), 32 d): 9,4 mg/l literature
2-ethylhexyl acrylate	LC 50 (Salmo gairdneri, 96 h): 4,6 mg/l LC 50 (Oncorhynchus mykiss (rainbow trout), 96 h): 1,81 mg/l
triethyleneglycol dimethacrylate	LC 50 (Danio rerio (zebra fish), 96 h): 16,4 mg/l
N,N-bis-(2-hydroxypropyl)-p-toluidine	LC 50 (Danio rerio (zebra fish), 96 h): 17 mg/l

##### Aquatic Invertebrates

**Product:** No data available.

**Specified substance(s):**

Methyl methacrylate	EC 50 (Daphnia magna (Water flea), 48 h): 69 mg/l NOEC (Daphnia magna (Water flea), 21 d): 37 mg/l
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2-ethylhexyl acrylate	EC 50 (Daphnia magna, 48 h): 8,74 mg/l EC 50 (Daphnia magna (Water flea), 48 h): 17,45 mg/l
N,N-bis-(2-hydroxypropyl)-p-toluidine	EC 50 (Daphnia magna (Water flea), 48 h): 28,8 mg/l

## Chronic hazards to the aquatic environment:

### Fish

**Product:** No data available.

**Specified substance(s):**  
2-ethylhexyl acrylate NOEC (Salmo salar (Atlantic salmon), 21 d): 0,78 mg/l

### Aquatic Invertebrates

**Product:** No data available.

**Specified substance(s):**  
2-ethylhexyl acrylate NOEC (Daphnia magna (Water flea), 21 d): 0,19 mg/l  
EC 50 (Daphnia magna (Water flea), 21 d): 0,5 mg/l

triethyleneglycol dimethacrylate NOEC (Daphnia magna (Water flea), 21 d): 32 mg/l

### Toxicity to Aquatic Plants

**Product:** No data available.

**Specified substance(s):**  
Methyl methacrylate EC 50 (Selenastrum capricornutum (green algae), 72 h): > 100 mg/l  
NOEC (Selenastrum capricornutum (green algae), 72 h): > 100 mg/l

2-ethylhexyl acrylate EC 50 (Desmodesmus subspicatus (green algae), 72 h): 14,6 mg/l  
EC 50 (Desmodesmus subspicatus (green algae), 72 h): 1,71 mg/l  
EC 50 (Pseudokirchneriella subcapitata (green algae), 72 h): 3,55 mg/l  
EC 50 (Desmodesmus subspicatus, 72 h): 5,28 mg/l

triethyleneglycol dimethacrylate EC 50 (Pseudokirchneriella subcapitata (green algae), 72 h): > 100 mg/l  
NOEC (Pseudokirchneriella subcapitata (green algae), 72 h): 18,6 mg/l

N,N-bis-(2-hydroxypropyl)-p-toluidine EC 50 (Desmodesmus subspicatus (green algae), 72 h): 245 mg/l

## Persistence and Degradability

### Biodegradation

**Product:** The product is biodegradable. (monomer constituent)

### BOD/COD Ratio

**Product:** No data available.

## Bioaccumulative potential

### Bioconcentration Factor (BCF)

**Product:** no evidence for hazardous properties

## Partition Coefficient n-octanol / water (log Kow)

**Product:** Log Kow: No data available.

**Mobility in soil:** no specific test data available

**Other adverse effects:** Prevent substance from entering soil, natural bodies of water and sewer systems.

## 13. Disposal considerations

**Disposal methods:** Waste is hazardous. It must be disposed of in accordance with the regulations after consultation of the competent local authorities and the disposal company in a suitable and licensed facility.

**Contaminated Packaging:** Contaminated packaging should ideally be emptied; it can then be recycled after having been decontaminated. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be taken for recycling.

## 14. Transport information

### International Regulations

#### IATA-DGR

UN/ID No. : UN 1866  
Proper shipping name : Resin solution STABILIZED  
Class : 3  
Packing group : II  
Labels : 3  
Packing instruction (cargo aircraft) : 364  
Packing instruction (passenger aircraft) : 353

#### IMDG-Code

UN number : UN 1866  
Proper shipping name : RESIN SOLUTION STABILIZED  
  
Class : 3  
Packing group : II  
Labels : 3  
EmS Code : F-E, S-E  
Marine pollutant : no

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

Not applicable for product as supplied.

### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## 15. Regulatory information

### International regulations

**Montreal protocol**

Not applicable

**Stockholm convention**

Not applicable

**Rotterdam convention**

Not applicable

**Kyoto protocol**

Not applicable

### Inventory Status:

Registration, Evaluation and Authorisation of Chemicals (REACH): preregistered, registered or exempted

US TSCA Inventory: On or in compliance with the inventory

Canada DSL Inventory List: On or in compliance with the inventory

Canada NDSL Inventory: Not on Inventory.

Australia AICS: On or in compliance with the inventory

Japan (ENCS) List: On or in compliance with the inventory

Korea Existing Chemicals Inv. (KECI): On or in compliance with the inventory

Philippines PICCS: On or in compliance with the inventory

China Inv. Existing Chemical Substances: Included on Inventory.

## 16. Other information, including date of preparation or last revision

**Issue Date:** 02.07.2019

**Revision Date:** 13.06.2019: ARGLO\_REG18.06.2019: ARGLO\_SUBTYP18.06.2019: ARGLO\_EXCOMP18.06.2019: ARGHS\_DOC18.06.2019: ARGHS\_HZ\_ING18.06.2019: ARGHS\_HZ\_ING18.06.2019: ARGHS\_HZ\_ING18.06.2019: ARGHS\_HZ\_ING18.06.2019: ARGHS\_UN\_ING18.06.2019: ARGHS\_OEL

**Version #:** 1.2

**Further Information:** The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

**Disclaimer:** This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.