

Rev 06 (29/11/21) _ ACO22B-SDS02

Safety Data Sheet Humidur® Char Component B

ACOTEC N.V.

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HUMIDURCHAR.

Let's face fire in one coat.

Section 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Humidur® Char Component B

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

Product use: Curing agent

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

Importer: Matrix Composites & Engineering
150 Quill Way
Henderson WA 6166
Australia
Telephone: +61 8 9412 1200
E-mail address: matrix@matrixengineered.com

Information provided by:

Acotec NV
Industrielaan 8 Zuid III
9320 Aalst (Erembodegem) – Belgium
Telephone: +32 53 83 86 60
E-mail address: info@acotec.be

1.4. Emergency telephone number

Emergency information:

- Matrix Composites & Engineering
During business hours: +61 8 9412 1200
After business hours (national call): 1300 729 130
- For Poison Advice in Australia: 131 126
To provide telephone consultation to medical professionals and the general public in case of acute and chronic poisonings – 24 h a day

Section 2 HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture according to the Regulation (EC) N° 1272/2008 (GHS)

Acute toxicity (oral): Category 4, H302
Acute toxicity (dermal): Category 4, H312
Acute toxicity (inhalation: vapour): Category 4, H332
Skin corrosion/irritation: Category 1B, H314
Serious eye damage/irritation: Category 1, H318
Skin sensitization: Category 1A, H317
Chronic aquatic toxicity: Category 3, H412



2.2. Label elements according to Regulation (EC) N° 1272/2008 (GHS)

Symbol(s):



Signal Word: Danger

Hazard Statements: H302
H312
H314
H317
H318
H332
H412

Precautionary Statements: P260
P261
P264
P270
P271
P272
P273
P280
P301 + P312
P301 + P330 + P331
P302 + P352
P303 + P361 + P353
P304 + P340
P305 + P351 + P338
P310
P312
P321
P322
P330
P333 + P313
P363

Storage: P405
Disposal: P501



2.3. Other dangers: none known

See section 16 for the full text of the above mentioned H and P statements.

Section 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: -

3.2. Mixtures

| PRODUCT/INGREDIENT NAME | CAS N° | REACH REG. N° | % | CLASSIFICATION REGULATION (EC) N° 1272/2008 [CLP] |
|--|------------|------------------|-------|---|
| Benzyl alcohol | 100-51-6 | 01-2119492630-38 | 40-70 | Acute Tox. 4, H302 Acute Tox. 4, H332 |
| Cyclohexane-methane-amine, 5-amino-1,3,3-trimethyl | 2855-13-2 | Pre-registered | 10-30 | Acute Tox. 4, H302 Acute Tox. 4, H312 Aquatic Chronic 3, H412 Skin Sens. 1A, H317 Skin Corr. 1B, H314 |
| Polyethylene-polyamine | 90640-67-8 | 01-2119487919-13 | 10-15 | Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr./Irrit. 1B, H314 Skin Sens. 1, H317 Aquatic Chronic 3, H412 |

Section 4 FIRST AID MEASURES

4.1. Description of first aid measures

General: No general information

Inhalation: When exposed to large amounts of steam and mist move to fresh air. Perform specific treatment if needed. If breathing is stopped or irregular, give artificial respiration and supply oxygen.

Skin contact: Rinse skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Thoroughly wash contaminated clothing before reuse. Get medical attention immediately. Go to the hospital immediately if symptoms (flare, irritation) occur. Prevent spreading on the skin. Wash thoroughly after handling.



- Eye contact:* Do not rub your eyes. Immediately rinse eyes with plenty of water for at least 15 minutes and call a doctor/physician. Get medical attention immediately. Remove contact lenses if worn.
- Ingestion:* Ask the advice of a doctor about whether or not to induce vomiting. Rinse your mouth with water immediately.

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

Not available

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

Notify medical personnel about contaminated situations and have them take appropriate protective measures.

Section 5 FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

Unsuitable extinguishing media: Avoid use of water spray jet for extinguishing

5.2. Special hazards arising from the substance or mixture

Hazards combustion products: Not available

5.3. Advice for firefighters

Move containers from fire area, if you can do so without any risk.

Cool containers with water until well after the fire is out.

Avoid inhalation of materials or combustion by-products.

Do not access if the tank is on fire.

Wear appropriate protective equipment.

Keep containers cool with water spray.

Use fire fighting procedures suitable for surrounding area.

Vapor or gas that is burned at distant ignition sources can be spread rapidly.

Section 6 ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

- Protective equipment: Wear proper protective equipment
- Emergency procedures: Not applicable
- If required, notify relevant authorities according to all applicable regulations.

For emergency responders:

Work against the wind, let the upwind people evacuate. Do not touch spilled material.

Stop leak if you can do so without any risk. Move container from the leak area to safe



area. Wear protective equipment when handling damaged containers or spilled material. Do not direct water at spill or source of leak. Avoid skin contact and inhalation.

6.2. Environmental precautions

Prevent runoff and contact with waterways, drains or sewers. If large amounts have been spilled, inform the relevant authorities. Avoid dispersal of spilt material and runoff and contact with waterways, drains and sewers. In case of large spills, advise emergency services.

6.3. Methods and material for containment and cleaning up

Containment: Clean up all spills immediately. Control personal contact by using protective equipment. Clear area of personnel and move up wind. No smoking, naked lights or ignition sources.

Cleaning up:

- Large spill: Stay upwind and keep out of low areas. Dike for later disposal. Notification to central government, local government, in case of emissions of at least the standard amount. Dispose of waste in accordance with local regulation. Appropriate container for disposal of spilled material collected.
- Small leak: Sand or other non-combustible material, please use absorption material. Wipe off the solvent. Dike for later disposal. Prevent spillage into waterways, sewers, basements or confined spaces.

Other information: Slippery when spilt

6.4. Reference to other sections

See section 7 for information on safe handling

See section 8 for information on appropriate personal protective equipment

See section 13 for additional waste treatment information

Section 7 HANDLING AND STORAGE

7.1. Precautions for safe handling

Comply with all applicable laws and regulations for handling. Get the manual before use. Handle only in well ventilated places. Do not handle until all safety precautions have been read and understood. Do not inhale the steam prolonged or repeatedly.

7.2. Conditions for safe storage, including any incompatibilities

Check regularly for leaks. Keep in the original container. Please pay attention to incompatibilities, materials and conditions to be avoided. Keep sealed when not in used. No open fire. Collect in sealed containers. Do not eat, drink or smoke when using this product. Store away from water and sewer.

7.3. Specific end use(s) recommendations: not available

See section 1 for information on relevant identified uses



Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

- European Union (EU) Commission Directive 2006/15/EC (IOEL Vs): Not available
- European Union (EU) Commission Directive 2006/15/EC (IOEL Vs) – Skin: Not available

Recommended monitoring procedures: Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

DNEL/DMEL/PNEC - values: Not available

8.2. Exposure controls

Appropriate engineering controls: A system of local and/or general exhaust is recommended to keep employee exposures above the exposure limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

The use of local exhaust ventilation is recommended to control emissions near the source.

Individual protection measures, such as personal protective equipment:

- Hand protection: Wear appropriate gloves
- Eye protection: Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield. Provide an emergency eye wash station and quick drench shower in the immediate work area.
- Respiratory protection: Under conditions of frequent use or heavy exposure, respiratory protection may be needed. Respiratory protection is ranked in order from minimum to maximum.
Consider warning properties before use.
Any chemical cartridge respirator with organic vapour cartridge(s).
Any chemical cartridge respirator with a full facepiece and organic vapour cartridge(s).
Any air-purifying respirator with a full facepiece and an organic vapor canister.
For unknown concentration or immediately dangerous to life or health: any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained breathing apparatus with a full facepiece.
In solid or dust form (e.g. sanding cured product), workers must wear a Class P1 Particulate filter mask in accordance with AS/NZS1716.
- Skin protection: Wear appropriate clothing
- Others: It is necessary to wear protective clothes and other protection equipment. Cover your face, head and neck.
Prior to removing protective garments the employee should undergo decontamination and be required to shower upon removal of the garments and hood.



Emergency deluge showers and eyewash fountains, supplied with potable water, should be located near, within sight of, and on the same level with locations where direct exposure is likely.

- Thermal hazards: Not available

Environmental exposure controls:

Do not let the product enter drains. For ecological information, refer to section 12.

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

| | |
|--|-----------------------|
| Physical state: | liquid |
| Colour: | light yellow |
| Odour: | not available |
| Odour threshold: | not available |
| pH: | not available |
| Melting point/freezing point: | not available |
| Initial boiling point and boiling range: | not available |
| Flash point: | > 131 °C (c.c.) |
| Evaporation rate: | not available |
| Flammability (solid, gas): | not available |
| Upper/lower flammability or explosive limits: | not available |
| Vapour pressure: | not available |
| Vapour density: | not available |
| Relative density: | 1,23 |
| Solubility: | not available |
| Partition coefficient: n-octanol/water (Log K _{ow}): | not available |
| Auto-ignition temperature: | not available |
| Decomposition temperature: | not available |
| Viscosity: | 20 – 30 mPa.s @ 25 °C |
| Explosive properties: | not available |
| Oxidising properties: | not available |

9.2. Other information:

Not available

Section 10 STABILITY AND REACTIVITY

10.1. Reactivity

Not available

10.2. Chemical stability

This material is stable under recommended storage and handling conditions.



10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

When Part A is mixed with B until curing occurs, it does not form any new chemical compounds that are more hazardous than those present in either Part A or Part B before mixing occurs.

10.4. Conditions/Circumstances to avoid

Avoid contact with incompatible materials and conditions.

Avoid accumulation of electrostatic charges, heating, flames and hot surfaces.

10.5. Incompatible materials

Not available

10.6. Hazardous decomposition products

May emit flammable vapour if involved in fire.

Section 11 TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity

- Oral - ATE MIX: 300 mg/kg – 2 000 mg/kg
 Benzyl alcohol: LD50 = 300 – 2 000 mg/l
 Cyclohexane-methane-amine, 5-amino- 1,3,3-trimethyl: LD50 = 300 – 2 000 mg/l
- Dermal - ATE MTX: 300 mg/kg – 2 000 mg/kg
 Cyclohexane-methane-amine, 5-amino- 1,3,3-trimethyl: LD50 = 1 000 – 2 000 mg/l
- Inhalation - ATE MIX: 2 500 ppm – 20 000 ppm
 Benzyl alcohol: LC50 = 2 500 – 20 000 mg/l

| PRODUCT/INGREDIENT NAME | ENDPOINT | SPECIES | RESULT | EXPOSURE |
|-------------------------|-------------|------------|---------------|----------|
| Polyethylene-polyamine | LD50 Oral | Rat | 1 716,2 mg/kg | - |
| | LD50 Dermal | Rat – Male | 1 720 mg/kg | - |

Acute toxicity estimates

| PRODUCT/INGREDIENT NAME | ROUTE | ATE (ACUTE TOXICITY ESTIMATION) VALUE |
|-------------------------|--------|---------------------------------------|
| Polyethylene-polyamine | Oral | 1 716,2 mg/kg |
| | Dermal | 1 720 mg/kg |



Conclusion/summary: not available

11.2. Skin corrosion / irritation

Causes severe skin burns and eye damage

11.3. Eye damage / irritation

Causes serious eye damage

11.4. Respiratory sensitization

Not available

11.5. Skin sensitization

May cause an allergic skin reaction

11.6. Germ cell mutagenicity

Not available

11.7. Carcinogenicity

IARC: Not available

OSHA: Not available

ACGIH Not available

NTP: Not available

EU CLP: Not available

11.8. Reproductive toxicity

Not available

11.9. Specific target organ toxicity (single exposure)

Not available

11.10. Specific target organ toxicity (repeated exposure)

Not available

11.11. Aspiration hazard

Not available

Section 12 ECOLOGICAL INFORMATION

12.1. Toxicity

Fish: Not available

Invertebrate: Not available

Algae: Not available



12.2. Persistence and degradability

Not available

12.3. Bio-accumulative potential

Bio-accumulation

| PRODUCT/INGREDIENT NAME | LOG P _{ow} | BCF | POTENTIAL |
|-------------------------|---------------------|-----|-----------|
| Polyethylene-polyamine | -2,65 | - | Low |

Biodegradability: Not available

12.4. Mobility in soil

Not available

12.5. Results of PBT and vPvB assessment

Not available

12.6. Other adverse effects

Harmful to aquatic life with long lasting effects.

Section 13 DISPOSAL CONSIDERATIONS

Waste treatment methods: Since more than two kinds of designated waste are mixed, it is difficult to treat separately, there can be reduction or stabilization by incineration of similar process.

If water separation is possible, pre-process with water separation process.

Dispose by incineration.

The user of this product must dispose of it himself or entrust this to a waste disposer or person who recycles and disposes other's waste, a person who establishes and operates waste disposal facilities.

Dispose of waste in accordance with all applicable laws and regulations.

Section 14 TRANSPORT INFORMATION

Conform Australian Dangerous Goods Code, 2018, Edition 7.6.

14.1. UN number

ADR/RID: UN2735

IMDG: UN2735

ICAO/IATA: UN2735

14.2. UN proper shipping name

Amines, liquid, corrosive, N.O.S. or Polyamines, liquid, N.O.S. (Isophorone diamine)



14.3. Transport hazard class(es)

ADR/RID: 8, corrosive substances

IMDG: 8

ICAO/IATA: 8



Transport labels:

14.4. Packing group

ADR/RID: III

IMDG: III

IATA: III

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Local transport:

In accordance with Dangerous Goods Safety Management Law

Package and transport:

In accordance with Department of Transportation (DOT) and other regulatory agency requirements

EmS fire schedule:

F-A (general fire schedule)

EmS spillage schedule:

S-B (corrosive substances)

Emergency action code:

2X

Hazard N° ADR:

88

Tunnel restriction code:

1 (E)

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

Not available

Section 15 REGULATORY INFORMATION

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

Europe Regulatory

REACH restricted substance under REACH: Not applicable

REACH substances subject to authorization under REACH: Not applicable

REACH SVHC: Not applicable

EUROPE PBT: Not applicable

European Union (EU) Transport of Dangerous Goods by road – Dangerous Goods List: Not applicable

Australia inventory (AICS): All components are listed or exempted



15.2. Chemical safety assessment

Not conducted

Section 16 OTHER INFORMATION

16.1. Indications of changes

The safety data sheet has been reviewed and the data therein were revised and laid out according to the requirements of the Commission Regulation (EU) N° 453/2010.

16.2. Abbreviations and acronyms

1272/2008 CLP: Classification, Labelling and Packaging Regulation

REACH: Registration, evaluation and authorization of chemical substances

DNEL: Derived No Effect Level

PNEC: Predicted No Effect Concentration

16.3. Key literature references and sources for data

This safety data sheet was compiled with data and information from the following sources: RTECS, ECOSAR, HSDB, SIDS SIAP, ChemWATCH, CESAR, Chemical DB.

16.4. Classification procedure

The mixture classification has been derived based on the classification of the individual components in accordance with the rules set out in Regulation (EC) N° 1272/2008 (CLP) as well as the translation tables in Annex VII to the same regulation.

16.5. Training Advice

Not applicable

16.6. Further information

The MSDS is a hazard communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported hazards are risks in the workplace or other settings. Risks may be determined by reference to exposures scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

This information is based on our current knowledge and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should therefore not be construed as guaranteeing any specific property of the product.

Full text of abbreviated Hazard Statements:

| | |
|------|---|
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H314 | Causes severe skin burns and eye damage |
| H317 | May cause an allergic skin reaction |
| H318 | Causes serious eye damage |
| H332 | Harmful if inhaled |
| H412 | Harmful to aquatic life with long lasting effects |



Precautionary Statements:

| | |
|----------------|---|
| P260 | Do not breathe dust/fumes/gas/mist/vapours/spray |
| P261 | Avoid breathing dust/fumes/gas/mist/vapours/spray |
| P264 | Wash thoroughly after handling |
| P270 | Do not eat, drink or smoke when using this product |
| P271 | Use only outdoors or in a well-ventilated area |
| P272 | Contaminated work clothing should not be allowed out of the workplace |
| P273 | Avoid release to the environment |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |
| P301+P312 | If swallowed: Call a POISON CENTER/doctor if you feel unwell |
| P301+P330+P331 | If swallowed: Rinse mouth. Do NOT induce vomiting |
| P302+P352 | IF ON SKIN: Wash with plenty of water |
| P303+P361+P353 | If on skin (or hair): Take off immediately all contaminated clothing, rinse skin with water/ shower |
| P304+P340 | If inhaled: Remove person to fresh air and keep comfortable for breathing |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing |
| P310 | Immediately call a POISON CENTER/doctor |
| P312 | Call a POISON CENTER/ doctor if you feel unwell |
| P321 | Specific treatment (see label) |
| P322 | Specific measures |
| P330 | Rinse mouth |
| P333+P313 | If skin irritation or a rash occurs: Get medical advice/attention |
| P363 | Wash contaminated clothing before reuse |
| Storage: P405 | Store locked up |
| Disposal: P501 | Dispose of contents/container in accordance with local/regional/national/international regulation |

This information is based on our present state of knowledge. It should not therefore be construed as guaranteeing specific properties of the products described or their suitability for a particular application.

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