

**SAFETY DATA SHEET**according to Regulation (EC) No. 1907/2006  
Version 5.2 Revision Date 20.12.2013  
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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifiers**

Produktname : 4-Hydroxybenzotrifluoride

Product Number : 52086

Brand : UnaveraChemLab GmbH

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 402-45-9

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

Identified uses : Laboratory chemicals, Manufacture of substances

**1.3 Details of the supplier of the safety data sheet**

Company : UnaveraChemLab GmbH  
: Am Ländbach 20  
: D-82481 Mittenwald  
Germany

Telephon: : +49-8823-1351

Fax: : +49-8823-3449

email: : info@unavera.de

**1.4 Emergency telephone number** : +49-8823-1351

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Flammable solids (Category 1), H228  
Acute toxicity, Oral (Category 3), H301  
Skin irritation (Category 2), H315  
Serious eye damage (Category 1), H318  
Specific target organ toxicity - single exposure (Category 3), H335

For the full text of the H-Statements mentioned in this Section, see Section 16.

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Xn Harmful R22, R37/38, R41

For the full text of the R-phrases mentioned in this Section, see Section 16.

**2.2 Label elements****Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Danger

|                                |  |
|--------------------------------|--|
| Hazard statement(s)            |  |
| H228                           | Flammable solid.   |
| H301                           | Toxic if swallowed.  |
| H315                           | Causes skin irritation.  |
| H318                           | Causes serious eye damage.   |
| H335                           | May cause respiratory irritation.  |
| Precautionary statement(s)     |  |
| P210                           | Keep away from heat/sparks/open flames/hot surfaces. - No smoking.   |
| P261                           | Avoid breathing dust.  |
| P280                           | Wear protective gloves/ eye protection/ face protection.   |
| P301 + P310                    | IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.   |
| P305 + P351 + P338             | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Supplemental Hazard Statements | none   |

### 2.3 Other hazards - none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

|                           |   |
|---------------------------|---|
| Chemical characterization | : Natural product   |
| Synonyms                  | : $\alpha,\alpha,\alpha$ -Trifluoro-p-cresol<br>4-(Trifluoromethyl)phenol |
| Formula                   | : C <sub>7</sub> H <sub>5</sub> F <sub>3</sub> O                          |
| Molecular Weight          | : 162,11 g/mol  |
| CAS-No.                   | : 402-45-9  |
| EC-No.                    | : 206-945-7   |

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

| Component   | Classification  | Concentration |
|---|---|---------------|
| <b><math>\alpha,\alpha,\alpha</math>-Trifluoro-p-cresol</b> |   |               |
| CAS-No. 402-45-9<br>EC-No. 206-945-7                        | Flam. Sol. 1; Acute Tox. 3;<br>Skin Irrit. 2; Eye Dam. 1;<br>STOT SE 3; H228, H301,<br>H315, H318, H335 | <= 100 %      |

#### Hazardous ingredients according to Directive 1999/45/EC

| Component   | Classification         | Concentration |
|---|------------------------|---------------|
| <b><math>\alpha,\alpha,\alpha</math>-Trifluoro-p-cresol</b> |                        |               |
| CAS-No. 402-45-9<br>EC-No. 206-945-7                        | Xn, R22 - R37/38 - R41 | <= 100 %      |

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

no data available

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**SECTION 5: Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2 Special hazards arising from the substance or mixture**

Carbon oxides, Hydrogen fluoride

**5.3 Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information**

Use water spray to cool unopened containers.

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**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations (see section 13).

**6.4 Reference to other sections**

For disposal see section 13.

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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

Handle and store under inert gas.

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Components with workplace control parameters

### 8.2 Exposure controls

#### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

#### Personal protective equipment

##### Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

##### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

##### Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

##### Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

##### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

##### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

- |   |  |
|---|--|
| a) Appearance                                   | Form: crystalline  |
| b) Odour  | no data available  |
| c) Odour Threshold                              | no data available  |
| d) pH   | no data available  |
| e) Melting point/freezing point                 | Melting point/range: 45 - 47 °C - lit.                             |
| f) Initial boiling point and boiling range      | no data available  |
| g) Flash point                                  | 84 °C - closed cup   |
| h) Evaporation rate                             | no data available  |
| i) Flammability (solid, gas)                    | The substance or mixture is a flammable solid with the category 1. |
| j) Upper/lower flammability or explosive limits | no data available  |
| k) Vapour pressure                              | no data available  |
| l) Vapour density                               | no data available  |
| m) Relative density                             | no data available  |
| n) Water solubility                             | no data available  |
| o) Partition coefficient: n-octanol/water       | log Pow: 2,8   |
| p) Auto-ignition temperature                    | no data available  |
| q) Decomposition temperature                    | no data available  |
| r) Viscosity                                    | no data available  |
| s) Explosive properties                         | no data available  |
| t) Oxidizing properties                         | no data available  |

**9.2 Other safety information**

no data available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

no data available

**10.4 Conditions to avoid**

Heat, flames and sparks. Extremes of temperature and direct sunlight.

**10.5 Incompatible materials**

Acid chlorides, Acid anhydrides, Oxidizing agents

**10.6 Hazardous decomposition products**

Other decomposition products - no data available

In the event of fire: see section 5

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

no data available

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

no data available

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity****Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity****Specific target organ toxicity - single exposure**

no data available

**Specific target organ toxicity - repeated exposure**

no data available

**Aspiration hazard**

no data available

**Additional Information**

RTECS: Not available

Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue., prolonged or repeated exposure can cause:, Damage to the eyes., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**12.6 Other adverse effects**

no data available

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

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

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**SECTION 14: Transport information****14.1 UN number**

ADR/RID: 2926

IMDG: 2926

IATA: 2926

**14.2 UN proper shipping name**ADR/RID: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. ( $\alpha,\alpha,\alpha$ -Trifluoro-p-cresol)IMDG: FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S. ( $\alpha,\alpha,\alpha$ -Trifluoro-p-cresol)IATA: Flammable solid, toxic, organic, n.o.s. ( $\alpha,\alpha,\alpha$ -Trifluoro-p-cresol)**14.3 Transport hazard class(es)**

ADR/RID: 4.1 (6.1)

IMDG: 4.1 (6.1)

IATA: 4.1 (6.1)

**14.4 Packaging group**

ADR/RID: II

IMDG: II

IATA: II

**14.5 Environmental hazards**

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

**14.6 Special precautions for user**

no data available

**SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

**15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

**SECTION 16: Other information****Full text of H-Statements referred to under sections 2 and 3.**

|             |  |
|-------------|--|
| Acute Tox.  | Acute toxicity                                   |
| Eye Dam.    | Serious eye damage                               |
| Flam. Sol.  | Flammable solids                                 |
| H228        | Flammable solid.                                 |
| H301        | Toxic if swallowed.                              |
| H315        | Causes skin irritation.                          |
| H318        | Causes serious eye damage.                       |
| H335        | May cause respiratory irritation.                |
| Skin Irrit. | Skin irritation                                  |
| STOT SE     | Specific target organ toxicity - single exposure |

**Full text of R-phrases referred to under sections 2 and 3**

|        |  |
|--------|--|
| Xn     | Harmful                                    |
| R22    | Harmful if swallowed.                      |
| R37/38 | Irritating to respiratory system and skin. |

R41 Risk of serious damage to eyes.

**Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. UnaveraChemLab GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.