

Safety Data Sheet

according to Regulation (EC) No. 1907/2006



Printing date 31.08.2009

Revision: 31.08.2009

1 Identification of the substance/preparation and of the company/undertaking

· Product details

· **Trade name:** BUTYRIC ACID ISOBUTYL ESTER ROTICHROM® GC

· **Article number:** 3921

· **Application of the substance / the preparation** Laboratory chemical

· **Manufacturer/Supplier:**

Carl Roth GmbH + Co.KG

Schoemperlenstraße 3-5

76185 Karlsruhe

Telefon: +49/(0)721 5606-0

Telefax: +49/(0)721 5606-149

e-mail: info@carlroth.de

· **Further information obtainable from:** Department Health, Safety and Environment

· **Information in case of emergency:** Poison Centre Munich

Telefon +49/(0)89 19240

2 Hazards identification

· **Hazard description:** Not applicable.

· **Information concerning particular hazards for human and environment:**

R 10 Flammable.

· **GHS label elements**



Warning

2.6/3 - Flammable liquid and vapour.

· **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Wear protective gloves/protective clothing/eye protection/face protection.

· **Response:**

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

· **Storage:**

Store in a well-ventilated place. Keep cool.

· **Disposal:**

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

All chemicals are potentially dangerous. They should only be handled by specially trained personnel.

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Description**

539-90-2 isobutyl butyrate

· **Identification number(s)**

· **EC Number:** 208-729-8

4 First-aid measures

· **General information:**

Immediately remove any clothing soiled by the product.

First Aider: Pay attention to self-protection!

General advice: No induce of vomiting by layman.

· **After inhalation:** Supply fresh air and to be sure call for a doctor.

· **After skin contact:**

Immediately rinse with water.

If skin irritation continues, consult a doctor.

· **After eye contact:** Rinse opened eye for 10 minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:**

Rinse out mouth and drink a glass of water. Do not induce vomiting.

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Seek medical advice immediately and show the container or label.
Call for a doctor immediately.

5 Fire-fighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards caused by the substance, its products of combustion or resulting gases:**
Forms explosive mixtures with air at elevated temperatures.
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Keep away from ignition sources.
Do not breathe vapour/spray.
Avoid contact with the eyes and skin.
Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Do not allow to enter sewers/ surface or ground water.
Do not allow to penetrate the ground/soil.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (e.g. Rotisorb® Art.-Nr. 1710.1).
Dispose of the material collected according to regulations.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Keep away from heat and direct sunlight.
Prevent formation of aerosols.
Do not spray on a naked flame or any incandescent material.
Keep containers, equipment and working place clean.
Handling corresponding to laboratory safety guidelines.
- **Information about fire - and explosion protection:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Flammable gas-air mixtures may form in empty receptacles.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep container tightly sealed.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.

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- **Personal protective equipment:**

- **General protective and hygienic measures:**

Do not eat, drink, smoke or sniff while working.
 Keep away from foodstuffs, beverages and feed.
 Immediately remove all soiled and contaminated clothing.
 Wash hands before breaks and at the end of work.
 Do not inhale gases / fumes / aerosols.
 Avoid contact with the eyes and skin.

- **Respiratory protection:**

Required when vapours/aerosols are generated. Filter A (colour code: brown).
 Use suitable respiratory protective device only when aerosol or mist is formed.
 Required when vapours/aerosols are generated.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 Due to missing tests no recommendation to the glove material can be given for the product.
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **General Information**

Form: Fluid
Colour: Colourless
Odour: Characteristic

- **Change in condition**

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: 157°C

- **Flash point:** 46°C (c.c.)

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures is possible.

- **Vapour pressure at 20°C:** 3.9 hPa

- **Density at 20°C:** 0.84 g/cm³

- **Solubility in / Miscibility with water:** Not miscible or difficult to mix.

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heating
- **Materials to be avoided:** Strong oxidizing agents.

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- **Dangerous reactions** No information available.
- **Dangerous decomposition products:** No information available.

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values relevant for classification:**
 - Oral LD50 >5000 mg/kg (rat)
 - 9500 mg/kg (rabbit)
 - Dermal LD50 >5000 mg/kg (rabbit)
- **Primary irritant effect:**
- **on the skin:** Slight irritations.
- **on the eye:** Slight irritations
- **after inhalation:** Slight irritations.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
 - Inhalation of concentrated vapours as well as oral intake will lead to anaesthesia-like conditions and headache, dizziness, etc.
 - After swallowing irritations in the mouth, throat, oesophagus and gastrointestinal tract.
- **Further information:** The product should be handled with the care usual when dealing with chemicals.

12 Ecological information

- **Ecotoxicological effects:**
- **Aquatic toxicity:** Quantitative data on the ecological effect of this product are not available.
- **Remark:** Do not allow to enter waters, waste water, or soil!
- **General notes:**
 - Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
 - Do not allow product to reach ground water, water course or sewage system.
 - Danger to drinking water if even small quantities leak into the ground.

13 Disposal considerations

- **Product:**
- **Recommendation**
 - The disposal is regionally differently regulated, therefore the kind of disposal is to be inquired at the responsible authorities.
- **Uncleaned packaging:**
- **Recommendation:** Disposal according to official regulations.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 30
- **UN-Number:** 3272
- **Packaging group:** III
- **Hazard label** 3

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· **Description of goods:** 3272 ESTERS, N.O.S. (isobutyl butyrate)· **Maritime transport IMDG:**

- **IMDG Class:** 3
- **UN Number:** 3272
- **Label** 3
- **Packaging group:** III
- **EMS Number:** F-E,S-D
- **Marine pollutant:** No
- **Proper shipping name:** ESTERS, N.O.S. (ISOBUTYL ISOBUTYRATE)
- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 3272
- **Label** 3
- **Packaging group:** III
- **Proper shipping name:** ESTERS, N.O.S. (ISOBUTYL ISOBUTYRATE)
- **UN "Model Regulation":** UN3272, ESTERS, N.O.S., 3, III

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15 Regulatory information

- **Labelling according to EU guidelines:**
Classification and labeling have been performed according to EU directive 67/548/EEC / directive 1999/45/EC.
- **Risk phrases:**
10 Flammable.
- **National regulations:**
- **Information about limitation of use:**
Employment restrictions concerning juveniles must be observed.
In dealing with chemicals the national laws must be observed.
- **Waterhazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant R-phrases** Flammable.
- **Department issuing MSDS:** Department: Health, Safety and Environment
- **Contact:** Herr Dr. Hagel
- **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances

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CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent

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· *** Data compared to the previous version altered.**

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