

## Safety Data Sheet

# RTC-Ribomethylester

according to Regulation (EU) nr. 1907/2006

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

### 1.1. Product identifier

Product name                      RTC-Ribomethylester  
Product code                      04 7185 2

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

Use                                      - intermediate in the synthesis of an active pharmaceutical compound

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

Company information	Enquiries: F. Hoffmann-La Roche AG Postfach CH-4070 Basel Switzerland	Local representation:
	Phone      +41-61/688 54 80	
	Fax        +41-61/681 72 76	
	E-Mail     info.sds@roche.com	

### 1.4. Emergency telephone number

Emergency telephone number      Phone      +41-61/688 54 80

## SECTION 2: Hazards identification

### 2.1. / 2.2. Classification of the substance or mixture / Label elements

GHS Classification                      no classification and labelling according to CLP (EC Regulation 1272/2008)

### 2.3. Other hazards

Note                                      - may form explosible dust-air mixture if dispersed

## SECTION 3: Composition/information on ingredients

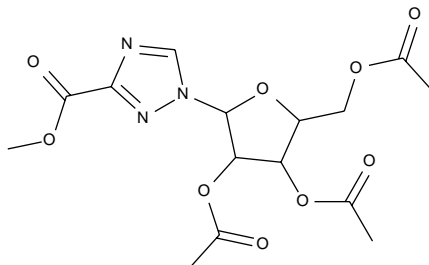
Chemical name                      - Methyl-1-(2,3,5-tri-O-acetyl- $\beta$ -D-ribofuranosyl)-1,2,4-triazole-3-carboxylate  
CAS number                              39925-10-5

## RTC-Ribomethylester

Roche number RO0313952-000

Empirical formula  $C_{15}H_{19}N_3O_9$

Molecular mass 385.33 g/mol



### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- |              |  |
|--------------|--|
| Eye contact  | - rinse immediately with tap water for at least 20 minutes - open eyelids forcibly                           |
| Skin contact | - remove immediately contaminated clothes, wash affected skin with water and soap - do not use any solvents  |
| Inhalation   | - remove the casualty to fresh air and keep him/her calm<br>- in the event of symptoms get medical treatment |

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

- |      |                            |
|------|----------------------------|
| Note | - no information available |
|------|----------------------------|

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

- |                   |                         |
|-------------------|-------------------------|
| Note to physician | - treat symptomatically |
|-------------------|-------------------------|

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- |                              |   |
|------------------------------|---|
| Suitable extinguishing media | - water spray jet, dry powder, foam, carbon dioxide |
|------------------------------|---|

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

- |                  |   |
|------------------|---|
| Specific hazards | - formation of toxic and corrosive combustion gases (nitrogen oxides (NOx)) possible<br>- violent decomposition after exposure to heat<br>- very high dust explosion hazard |
|------------------|---|

## 5.3. Advice for firefighters

- |                             |  |
|-----------------------------|--|
| Protection of fire-fighters | - precipitate gases/vapours/mists with water spray |
|                             | - fight the fire only from a safe distance         |

## SECTION 6: Accidental release measures

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

- |                      |                                   |
|----------------------|-----------------------------------|
| Personal precautions | - no special precautions required |
|----------------------|-----------------------------------|

### 6.2. Environmental precautions

- |                          |   |
|--------------------------|---|
| Environmental protection | - no special environmental precautions required |
|--------------------------|---|

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

- |                         |  |
|-------------------------|--|
| Methods for cleaning up | - collect solids (avoid dust formation) and hand over to waste removal |
|-------------------------|--|

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- |                    |   |
|--------------------|---|
| Technical measures | - processing in closed systems, if possible superposed by inert gas (e.g. nitrogen) |
|                    | - local exhaust ventilation necessary   |
|                    | - take precautionary measures against electrostatic charging                        |
|                    | - avoid dust formation; very high dust explosion hazard                             |
| Suitable materials | - stainless steel, glass, enamel  |

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

- |      |                            |
|------|----------------------------|
| Note | - no information available |
|------|----------------------------|

### 8.2. Exposure controls

- |                        |  |
|------------------------|--|
| Respiratory protection | - in case of open handling or accidental release:<br>particle mask or respirator with independent air supply |
| Hand protection        | - protective gloves (eg made of neoprene, nitrile or butyl rubber)   |
| Eye protection         | - safety glasses   |

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Colour	white
Form	solid
Partition coefficient	log P <sub>ow</sub> 1.1 (n-octanol/water 25 °C) (HPLC Method, OECD No. 117)
Melting temperature	108 °C

### 9.2. Other information

Note	- no information available
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Note	- no information available
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### 10.2. Chemical stability

Stability	<ul style="list-style-type: none"> <li>- in case of long-lasting processes (several hours or days) in the range of the highest acceptable temperature a decomposition with strongly exothermic course can be expected</li> <li>- salts with a catalytic effect such as Fe<sub>2</sub>O<sub>3</sub> (rust) accelerate the decomposition</li> </ul>
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### 10.3. Possibility of hazardous reactions

Note	- no information available
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### 10.4. Conditions to avoid

Conditions to avoid	- temperatures above 120 °C
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### 10.5. Incompatible materials

Note	- no information available
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### 10.6. Hazardous decomposition products

Note	- no information available
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity	- LD <sub>50</sub> > 2'000 mg/kg (oral, rat) (OECD No. 423 (Acute Toxic Class Method))
Local effects	- skin: non-irritant (rabbit; OECD No. 404)
Sensitization	- no information available
Mutagenicity	- not mutagenic (bacterial in vitro test system; OECD No. 471 (Salmonella typhimurium))
Carcinogenicity	- no information available
Reproductive toxicity	- no information available
STOT-single exposure	- no information available
STOT-repeated exposure	- no information available
Aspiration hazard	- no information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecotoxicity	- barely toxic for fish (rainbow trout) LC <sub>50</sub> (96 h) > 100 mg/l (nominal concentration) NOEC (96 h) 79 mg/l (average measured concentration) (OECD No. 203, semi-static)
	- barely toxic for algae (Scenedesmus (=Desmodesmus) subspicatus) ErC <sub>50</sub> (72 h) > 100 mg/l (nominal concentration) EbC <sub>50</sub> (72 h) 86.8 mg/l (average measured concentration) NOEC (72 h) 50 mg/l (nominal concentration) (OECD No. 201)
	- barely toxic for planktonic crustaceans (Daphnia magna) EC <sub>50</sub> (96 h) > 100 mg/l (nominal concentration) NOEC (96 h) 98 mg/l (average measured concentration) (OECD No. 202, semi-static)
	- no adverse influence on substrate biodegradation (activated sludge) concentration (14 d) 100 mg/l (nominal concentration) (Manometric Respirometry Test, OECD No. 301 F)

### 12.2. Persistence and degradability

Ready biodegradability	- not readily biodegradable rapid primary degradation through hydrolysis ~ 47 %, 28 d (Manometric Respirometry Test, OECD No. 301 F)
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## RTC-Ribomethylester

- Abiotic degradation
- rapid degradation, hydrolysis 100 mg/l; HPLC  
 $t_{1/2} \sim 24$  h,  $\sim 22$  °C, dark  
(Manometric respirometry test, OECD no. 301 F)

### 12.3. Bioaccumulative potential

- Note
- no information available

### 12.4. Mobility in soil

- Note
- no information available

### 12.5. Results of PBT and vPvB assessment

- Note
- no information available

### 12.6. Other adverse effects

- Air pollution
- observe local/national regulations

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Waste from residues
- observe local/national regulations regarding waste disposal
  - incinerate in qualified installation with flue gas scrubbing

## SECTION 14: Transport information

- Note
- not classified as Dangerous Good according to the Dangerous Goods Regulations

## SECTION 15: Regulatory information

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

- Water hazard class (Germany)
- 1: weakly hazardous for water (own classification according to directive VwVwS of 17.05.1999)

## SECTION 16: Other information

- Safety-lab number
- BS-6713
  - BS-6759
  - BS-9648
- Edition documentation
- changes from previous version in sections 2, 6

The information in this safety data sheet is based on current scientific knowledge. It should not be taken as expressing or implying any warranty concerning product characteristics.