

Trade name: REFRESH KIT FOR FTD GC-17A AND 2010**Product no.:** 221-49079-91**Current version :** 1.0.1, issued: 02.09.2014**Replaced version:** 1.0.0, issued: 01.09.2014**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name

REFRESH KIT FOR FTD GC-17A AND 2010**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses of the substance or mixture

Chemical processes general

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

Shimadzu Europa GmbH

Albert-Hahn-Str. 6-10

47269 Duisburg

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Information provided by / telephone

Tel.: +49 (0)203 - 7687-0

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Irrit. 2; H319

Repr. 1B; H360

Skin Irrit. 2; H315

Classification in accordance with Directive 67/548/EEC or 1999/45/EC

Repr.Cat.2; R60

Repr.Cat.2; R61

Xi; R36/38

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

Hazard pictograms



GHS07



GHS08

Signal word

Danger

Hazardous component(s) to be indicated on label:

diboron trioxide

Hazard statements

H315

Causes skin irritation.

H319

Causes serious eye irritation.

H360

May damage fertility or the unborn child

Precautionary statements

P201

Obtain special instructions before use.

P280

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

P308+P313

IF exposed or concerned: Get medical advice/attention.

P501

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

Supplemental label elements

"Restricted to professional users"

2.3 Other hazards

No data available.

Trade name: REFRESH KIT FOR FTD GC-17A AND 2010

Product no.: 221-49079-91

Current version : 1.0.1, issued: 02.09.2014

Replaced version: 1.0.0, issued: 01.09.2014

Region: GB

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification 67/548/EEC	Classification (EC) 1272/2008 (CLP)	Concentration %
1	diboron trioxide			
	1303-86-2 215-125-8 005-008-00-8 -	Repr.Cat.2; R60 Repr.Cat.2; R61	Repr. 1B; H360FD	> 30.00 - < 50.00 %-b.w.
2	rubidium-carbonate			
	584-09-8 209-530-9 -	Xi; R36/38	Eye Irrit. 2; H319 Skin Irrit. 2; H315	> 10.00 - < 30.00 %-b.w.
3	silicon dioxide, chemically prepared			
	7631-86-9 231-545-4 - -	-	-	> 10.00 - < 30.00 %-b.w.

Full Text for all R-phrases , H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
1	-	Repr. 1B; H360FD: C >= 3.1%	-	-

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

In case of persisting adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation

Remove affected person from the immediate area. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.

After eye contact

Separate eyelids, wash the eyes thoroughly with water (15 min.). Seek medical assistance.

After ingestion

Seek medical advice immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

Unsuitable extinguishing media

No data available.

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO₂); Carbon monoxide (CO); Combustion products of this material have to be classed invariably as respiratory poison.

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

Trade name: REFRESH KIT FOR FTD GC-17A AND 2010

Product no.: 221-49079-91

Current version : 1.0.1, issued: 02.09.2014

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Remove persons to safety.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Take up mechanically and send for disposal. When picked up, treat material as prescribed under heading "Disposal considerations".

6.4 Reference to other sections

No data available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Provide good ventilation of working area (local exhaust ventilation, if necessary).

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work. Avoid product contact with skin, eyes and clothing; Do not inhale dust.

Advice on protection against fire and explosion

Keep away from sources of heat and ignition. Avoid dust development, danger of dust explosion.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

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

Requirements for storage rooms and vessels

Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original one.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	diboron trioxide	1303-86-2	215-125-8
List of approved workplace exposure limits (WELs) / EH40			
Diboron trioxide			
	STEL	20	mg/m ³
	TWA	10	mg/m ³
2	silicon dioxide, chemically prepared	7631-86-9	231-545-4
List of approved workplace exposure limits (WELs) / EH40			
Silica, amorphous			
inhalable dust			
	TWA	6	mg/m ³
List of approved workplace exposure limits (WELs) / EH40			
Silica, amorphous			
respirable dust			
	TWA	2.4	mg/m ³

8.2 Exposure controls

Appropriate engineering controls

No data available.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

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Current version : 1.0.1, issued: 02.09.2014

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Region: GB

Eye / face protection

Safety glasses with side protection shield (EN 166)

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other

Normal chemical work clothing.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form/Colour
Powder
white
Odour
odourless

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Product no.: 221-49079-91

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Odour threshold	No data available
pH value	No data available
Boiling point / boiling range	No data available
Melting point / melting range	No data available
Decomposition point / decomposition range	No data available
Flash point	No data available
Auto-ignition temperature	No data available
Oxidising properties	No data available
Explosive properties	No data available
Flammability (solid, gas)	No data available
Lower flammability or explosive limits	No data available
Upper flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Evaporation rate	No data available
Relative density	No data available
Density	No data available
Solubility in water	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol/water	No data available
Viscosity	No data available

9.2 Other information

Other information	No data available.
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SECTION 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

No data available.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

No data available.

10.6 Hazardous decomposition products

In case of fire the following can be released: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity	No data available
Acute dermal toxicity	No data available
Acute inhalational toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Reproduction toxicity	No data available
Carcinogenicity	No data available
STOT-single exposure	No data available
STOT-repeated exposure	No data available
Aspiration hazard	No data available
Delayed and immediate effects as well as chronic effects from short and long-term exposure	Contact with the skin and eyes may cause mechanical irritation.
Other information	Exercise customary precautions when handling chemicals.

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SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)
No data available

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria 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

No data available.

12.6 Other adverse effects

No data available.

12.7 Other information

Other information
Do not allow to enter soil, waterways or waste water canal.
Ecological data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

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SECTION 14: Transport information

14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

14.2 Transport IMDG

The product is not subject to IMDG regulations.

14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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

Not relevant

SECTION 15: Regulatory information

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

EU regulations

Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Remarks

Annex I, part 1 + 2: not mentioned. With regard to possibly appropriate decomposition products see Chapter 10.

15.2 Chemical safety assessment

No data available.

SECTION 16: Other information

Sources of key data used to compile the data sheet:

EC Directive 67/548/EC resp. 1999/45/EC as amended in each case.

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

Full text of the R-, H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)

R36/38 Irritating to eyes and skin.

R60 May impair fertility.

R61 May cause harm to the unborn child.

H360FD May damage fertility. May damage the unborn child.

Department issuing safety data sheet

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.