according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014 1.6 Date of first issue: 04.10.2012

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

1.1 Product identifier

Commercial Product Name : LC FS DNA Master Hy.Pb, 480 react.

Mat.-No./ Genisys-No. : 12239272001

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

Recommended restrictions

on use

: For professional users only.

1.3 Details of the supplier of the safety data sheet

Company : Roche Diagnostics Deutschland GmbH

-

Sandhoferstrasse 116 68305 Mannheim

E-mail address : mannheim.umweltschutz@roche.com

Telephone : +496217590 Telefax : +496217592890

Responsible Department : +49(0)621-759-2012+49(0)621-759-4848+49(0)8856-60-2629

1.4 Emergency telephone number

In case of emergencies: : Central Works Security +49(0)621-759-2203

Roche Diagnostics GmbH

Centre for detoxification: : Mainz +49(0)6131-19240

Munich +49(0)89-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section Label elements contains the resulting labelling for the kit.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.3 Other hazards

See SECTION 3

SECTION 3: Composition/information on ingredients

LightCycler Enzyme

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

LightCycler Reaction Mix , 10x conc.

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

MgCl2 Solution, 25mM

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

Water

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Classification (67/548/EEC, 1999/45/EC)

Not a hazardous substance or mixture.

Hazardous components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Do not leave the victim unattended.

If inhaled : Move to fresh air.

If unconscious place in recovery position and seek medical

advice.

If symptoms persist, call a physician.

In case of skin contact : If on skin, rinse well with water.

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

If eye irritation persists, consult a specialist.

If swallowed : Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

: No information available.

5.3 Advice for firefighters

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Standard procedure for chemical fires.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions : Local authorities should be advised if significant spillages

cannot be contained.

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014 1.6 Date of first issue: 04.10.2012

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

Treat recovered material as described in the section "Disposal considerations".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor-

age conditions

: See label, package insert or internal guidelines

Advice on common storage : No materials to be especially mentioned.

Storage class (TRGS 510) : 12, Non Combustible Liquids

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

LightCycler Enzyme

Contains no substances with occupational exposure limit values.

LightCycler Reaction Mix , 10x conc.

Contains no substances with occupational exposure limit values.

MgCl2 Solution, 25mM

according to Regulation (EC) No. 1907/2006

Roche

LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014 1.6 17.02.2015 Date of first issue: 04.10.2012

Contains no substances with occupational exposure limit values.

Water

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Protective gloves

Remarks : The selected protective gloves have to satisfy the specifica-

tions of EU Directive 89/686/EEC and the standard EN 374 derived from it. This recommendation is only valid for the product mentioned in the safety data sheet and provided by us and for the application specified by us. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The suitability for a specific workplace should be discussed with the producers of the protective

gloves.

Skin and body protection : Protective suit

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

LightCycler Enzyme

Appearance : liquid

Colour : colourless

Odour : none

Odour Threshold : No data available

pH : 9

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available Flammability (solid, gas) : No data available

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available Relative vapour density : No data available Relative density : No data available Density : No data available

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

Ignition temperature : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

: No data available

LightCycler Reaction Mix , 10x conc.

Appearance : liquid

Colour : clear

light yellow

Odour : none

Odour Threshold : No data available

pH : 8,3

Melting point/range : No data available

Boiling point/boiling range : No data available

Flash point : No data available

Evaporation rate : No data available Flammability (solid, gas) : No data available Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available
Relative vapour density : No data available
Relative density : No data available
Density : No data available

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

: No data available

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

Ignition temperature : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

MgCl2 Solution, 25mM

Appearance : liquid

Colour : colourless

Odour : none

Odour Threshold : No data available

pH : 6-8

Melting point/freezing point : No data available Initial boiling point and boiling : No data available

range

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Does not sustain combustion.

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapour pressure : No data available Relative vapour density : No data available Relative density : No data available Density : No data available

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

: No data available

Ignition temperature : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Water

Appearance : liquid

Colour : colourless

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

Odour : none

Odour Threshold : No data available

pH : 7,0

Melting point/range : 0,0 °C

Boiling point/boiling range : 99,97 °C

(1.013 hPa)

Flash point : does not flash

Evaporation rate : No data available

Flammability (solid, gas) : Does not sustain combustion.

Upper explosion limit : No data available Lower explosion limit : No data available Vapour pressure : 0,61 hPa (0 °C)

23,4 hPa (20 °C)

31,7 hPa (25 °C)

123,3 hPa (50 °C)

385,4 hPa (75 °C)

1.013 hPa (99,97 °C)

Relative vapour density

Relative density Density : No data available: No data available: 0,999 g/cm3 (0 °C)

1,000 g/cm3 (3,98 °C)

0,997 g/cm3 (25 °C)

0,958 g/cm3 (99,97 °C)

Solubility(ies)

Solubility in other solvents : (20 °C)

Solvent: Alcohol

Description: completely miscible

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014 1.6 Date of first issue: 04.10.2012

Partition coefficient: n-

octanol/water

: No data available

Auto-ignition temperature : No data available

Decomposition temperature

: No data available

Viscosity

Viscosity, dynamic : 0,998 mPa.s (20 °C)

0,285 mPa.s (99,97 °C)

Explosive properties : No data available

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other information

LightCycler Enzyme

No data available

LightCycler Reaction Mix , 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

Molecular weight : 18,02 g/mol

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

Stable under recommended storage conditions.

No hazards to be specially mentioned.

10.4 Conditions to avoid

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

LightCycler Enzyme

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

LightCycler Reaction Mix , 10x conc.

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

according to Regulation (EC) No. 1907/2006

Roche

LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 17.02.2015 Date of first issue: 04.10.2012

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

MgCl2 Solution, 25mM

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

Water

Acute toxicity

Not classified based on available information.

Skin corrosion/irritation

Not classified based on available information.

according to Regulation (EC) No. 1907/2006

Roche

LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 17.02.2015 Date of first issue: 04.10.2012

Serious eye damage/eye irritation

Not classified based on available information.

Respiratory or skin sensitisation

Skin sensitisation: Not classified based on available information. Respiratory sensitisation: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

LightCycler Enzyme

No data available

LightCycler Reaction Mix, 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

No data available

12.2 Persistence and degradability

LightCycler Enzyme

No data available

LightCycler Reaction Mix , 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

No data available

12.3 Bioaccumulative potential

LightCycler Enzyme

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 17.02.2015 Date of first issue: 04.10.2012

No data available

LightCycler Reaction Mix , 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

No data available

12.4 Mobility in soil

LightCycler Enzyme

No data available

LightCycler Reaction Mix , 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

No data available

12.5 Results of PBT and vPvB assessment

LightCycler Enzyme

Not relevant

LightCycler Reaction Mix , 10x conc.

Not relevant

MgCl2 Solution, 25mM

Not relevant

Water

Not relevant

12.6 Other adverse effects

LightCycler Enzyme

No data available

LightCycler Reaction Mix , 10x conc.

No data available

MgCl2 Solution, 25mM

No data available

Water

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Can be disposed as waste water, when in compliance with

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014 1.6 17.02.2015 Date of first issue: 04.10.2012

local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal. Do not re-use empty containers.

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not dangerous goods in the meaning of ADR/RID, ADNR,

IMDG-Code, ICAO/IATA-DGR

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

Remarks : Not applicable

SECTION 15: Regulatory information

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

Seveso II - Directive 2003/105/EC amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

Water contaminating class

(Germany)

: WGK 1 slightly water endangering

LightCycler Enzyme

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

according to Regulation (EC) No. 1907/2006



LC FS DNA Master Hy.Pb, 480 react.

Version Revision Date: Date of last issue: 31.07.2014
1.6 Date of first issue: 04.10.2012

LightCycler Reaction Mix, 10x conc.

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

MgCl2 Solution, 25mM

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Water

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16: Other information

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

DE / EN