

according to Regulation (EC) No. 1907/2006

Revision Date 09.10.2013

Version 2.0

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

1.1 Product identifier

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-1

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0

Responsible Department EQ-RS * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3, H412

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

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

Dangerous for the environment R52/53

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.

Reduced labelling (≤125 ml)

Hazard statements

H412 Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006

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Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature

Mixture of inorganic and organic compounds

3.1 Substance not applicable

3.2 Mixture

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name (Concentration)

CAS-No. Registration number Classification troclosene sodium, dihydrate (>= 0,25 % - < 1 %)

51580-86-0 *) Acute toxicity, Category 4, H302

Eye irritation, Category 2, H319

Specific target organ toxicity - single exposure, Category 3, H335

Acute aquatic toxicity, Category 1, H400 Chronic aquatic toxicity, Category 1, H410

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

Hazardous components (1999/45/EC)

Chemical Name (Concentration)
CAS-No. Classification

troclosene sodium, dihydrate (>= 0,25 % - < 1 %)

51580-86-0 Xn, Harmful; R22

R31

Xi, Irritant; R36/37

N, Dangerous for the environment; R50/53

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

SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

^{*)} A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

according to Regulation (EC) No. 1907/2006

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SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapours.

Fire may cause evolution of:

Hydrogen chloride gas, Sulphur oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

according to Regulation (EC) No. 1907/2006

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Store at +15°C to +25°C.

The data applies to the entire pack.

7.3 Specific end use(s)

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

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

full contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm
Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 1 (acc. to DIN 3181) for solid particles of inert substances. The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form solid

Colour white

Odour of chlorine

Odour Threshold No information available.

pH No information available.

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas)

The product is not flammable.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density No information available.

Relative density No information available.

Water solubility at 20 °C

soluble

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

none

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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SECTION 10. Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

no information available

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

11.1 Information on toxicological effects

Mixture

Acute oral toxicity

Symptoms: Possible damages:, Irritation of mucous membranes

Acute inhalation toxicity

This information is not available.

Acute dermal toxicity

This information is not available.

Skin irritation

Possible damages: slight irritation

Eye irritation

Possible damages: slight irritation

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

according to Regulation (EC) No. 1907/2006

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11.2 Further information

However, when the product is handled appropriately, hazardous effects are unlikely to occur. Handle in accordance with good industrial hygiene and safety practice.

Components

troclosene sodium, dihydrate

Acute oral toxicity

LD50 rat: 550 - 1.600 mg/kg (External MSDS)

Acute dermal toxicity

LD50 rabbit: > 5.000 mg/kg (External MSDS)

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information 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

Discharge into the environment must be avoided.

Components

troclosene sodium, dihydrate

Toxicity to fish

LC50 Oncorhynchus mykiss (rainbow trout): 0,25 mg/l; 96 h (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 0,28 mg/l; 48 h (ECOTOX Database)

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

Land transport (ADR/RID)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9

14.4 Packing group

14.5 Environmentally hazardous --

14.6 Special precautions for yes

user

Tunnel restriction code E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9

14.4 Packing group

14.5 Environmentally hazardous --

14.6 Special precautions for no

user

Sea transport (IMDG)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9

14.4 Packing group

14.5 Environmentally hazardous --

14.6 Special precautions for

yes

user

EmS F-A S-P

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

Not relevant

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

SECTION 15. Regulatory information

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

EU regulations

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Major Accident Hazard 96/82/EC

Legislation Directive 96/82/EC does not apply

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at

work.

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European not regulated

Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending

Directive 79/117/EEC

Regulation (EC) No 689/2008 concerning the export not regulated

and import of dangerous chemicals

Substances of very high concern (SVHC)

This product does not contain substances

of very high concern above the respective regulatory limit (> 0.1 % (w/w) Regulation (EC) No 1907/2006 (REACH), Article 57).

National legislation

Storage class 3

The data applies to the entire pack.

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.

H302 Harmful if swallowed.

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

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

R22 Harmful if swallowed.

R31 Contact with acids liberates toxic gas.
R36/37 Irritating to eyes and respiratory system.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

Training advice

Provide adequate information, instruction and training for operators.

according to Regulation (EC) No. 1907/2006

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Labelling (67/548/EEC or 1999/45/EC)

R-phrase(s) 52/53 Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

S-phrase(s) 61 Avoid release to the environment. Refer to special

instructions/ Safety data sheets.

Reduced labelling (≤125 ml)

R-phrase(s) 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.



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

1.1 Product identifier

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-2

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0

Responsible Department EQ-RS * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1, H318

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

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

Xn Harmful R22 Xi Irritant R41

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word
Danger

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-2

Hazard statements

H318 Causes serious eye damage.

Precautionary statements

Prevention

P280 Wear eye protection.

Response

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P313 Get medical advice/ attention.

Contains: 1,3-Dimethylbarbituric acid

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature Mixture of organic compounds

3.1 Substance

not applicable

3.2 Mixture

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name (Concentration)

CAS-No. Registration number Classification 1,3-Dimethylbarbituric acid (>= 50 % - <= 100 %)

769-42-6 *) Acute toxicity, Category 4, H302

Serious eve damage, Category 1, H318

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

Hazardous components (1999/45/EC)

Chemical Name (Concentration)
CAS-No. Classification

1,3-Dimethylbarbituric acid (>= 50 % - <= 100 %)

769-42-6 Xn, Harmful; R22

Xi, Irritant; R41

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

SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water. Call in ophthalmologist.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

^{*)} A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-2

4.2 Most important symptoms and effects, both acute and delayed

irritant effects, Risk of serious damage to eyes.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Carbon dioxide (CO2), Foam, Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of:

nitrogen oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Avoid inhalation of dusts. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-2

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Store at +15°C to +25°C.

The data applies to the entire pack.

7.3 Specific end use(s)

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

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Tightly fitting safety goggles

Hand protection

full contact:

Glove material: Nitrile rubber
Glove thickness: 0,11 mm
Break through time: > 480 min

splash contact:

Glove material: Nitrile rubber Glove thickness: 0,11 mm
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment protective clothing

according to Regulation (EC) No. 1907/2006

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Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful

substances

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form solid

Colour beige

Odour odourless

Odour Threshold not applicable

pH No information available.

Melting point No information available.

Boiling point No information available.

Flash point No information available.

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density No information available.

Relative density No information available.

Water solubility at 20 °C

soluble

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

according to Regulation (EC) No. 1907/2006

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Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

Bulk density ca.500 kg/m³

SECTION 10. Stability and reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

10.4 Conditions to avoid

no information available

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

11.1 Information on toxicological effects Mixture

WIIXLUIC

Acute oral toxicity

Acute toxicity estimate: 2.373 mg/kg

Calculation method

absorption

Acute inhalation toxicity

Symptoms: Possible damages:, Irritation symptoms in the respiratory tract.

Acute dermal toxicity

This information is not available.

Skin irritation

This information is not available.

Eye irritation

Mixture causes serious eye damage.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components

1,3-Dimethylbarbituric acid

Acute oral toxicity

LD50 rat: 1.780 mg/kg (External MSDS)

Skin irritation

rabbit

Result: No irritation (External MSDS)

Eye irritation

rabbit

Result: Eye irritation

(External MSDS)

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information 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

Additional ecological information

Discharge into the environment must be avoided.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-2

Components

1,3-Dimethylbarbituric acid No information available.

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

Land transport (ADR/RID)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9
14.4 Packing group III

14.5 Environmentally hazardous --

14.6 Special precautions for

yes

user

Tunnel restriction code E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class914.4 Packing groupIII14.5 Environmentally hazardous--14.6 Special precautions forno

user

Sea transport (IMDG)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class914.4 Packing groupIII14.5 Environmentally hazardous--14.6 Special precautions foryes

user

EmS F-A S-P

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

Not relevant

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard 96/82/EC

Legislation Directive 96/82/EC does not apply

Occupational restrictions Take note of Dir 94/33/EC on the protection of young people at

work. Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where

applicable.

Regulation (EC) No 1005/2009 on substances that not regulated

deplete the ozone layer

Regulation (EC) No 850/2004 of the European not regulated

Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending

Directive 79/117/EEC

Regulation (EC) No 689/2008 concerning the export not regulated

and import of dangerous chemicals

Substances of very high concern (SVHC)

This product does not contain substances

of very high concern above the respective regulatory limit (> 0.1 % (w/w) Regulation (EC) No 1907/2006 (REACH), Article 57).

National legislation

Storage class 3

The data applies to the entire pack.

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.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

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

R22 Harmful if swallowed.

R41 Risk of serious damage to eyes.

Training advice

Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) Xn Harmful

R-phrase(s) 22-41 Harmful if swallowed. Risk of serious damage to eyes.

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S-phrase(s) 26-39 In case of contact with eyes, rinse immediately with plenty of

water and seek medical advice. Wear eye/face protection.

Reduced labelling (≤125 ml)

Symbol(s) Xn Harmful

R-phrase(s) 22-41 Harmful if swallowed. Risk of serious damage to eyes.

S-phrase(s) 26-39 In case of contact with eyes, rinse immediately with plenty of water

and seek medical advice. Wear eye/face protection.

Contains: 1,3-Dimethylbarbituric acid

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

This information is given on the authorised Safety Data Sheet for your country.

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product.



according to Regulation (EC) No. 1907/2006

Revision Date 09.10.2013

Version 2.0

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

1.1 Product identifier

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-3

REACH Registration Number This product is a mixture. REACH Registration Number see section 3.

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

Identified uses Reagent for analysis

For additional information on uses please refer to the Merck Chemicals

portal (www.merck-chemicals.com).

1.3 Details of the supplier of the safety data sheet

Company Merck KGaA * 64271 Darmstadt * Germany * Phone: +49 6151 72-0

Responsible Department EQ-RS * e-mail: prodsafe@merckgroup.com

1.4 Emergency telephone

number

Please contact the regional company representation in your country.

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008)

Flammable liquid, Category 3, H226

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

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

Flammable R10

Xn Harmful R20/21/22

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

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



Signal word
Warning

according to Regulation (EC) No. 1907/2006

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Hazard statements

H226 Flammable liquid and vapour.

Precautionary statements

Prevention

P210 Keep away from heat.

Reduced labelling (≤125 ml)

Hazard pictograms



Signal word Warning

Contains: Pyridine

2.3 Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature Mixture of solvents.

3.1 Substance

not applicable

3.2 Mixture

Hazardous components (REGULATION (EC) No 1272/2008)

Chemical Name (Concentration)

CAS-No. Registration number Classification

Pyridine (>= 25 % - < 50 %)

110-86-1 *) Flammable liquid, Category 2, H225

Acute toxicity, Category 4, H332 Acute toxicity, Category 4, H312 Acute toxicity, Category 4, H302

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

Hazardous components (1999/45/EC)

Chemical Name (Concentration)
CAS-No. Classification
Pyridine (>= 25 % - < 50 %)

110-86-1 F, Highly flammable; R11

Xn, Harmful; R20/21/22

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

^{*)} A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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SECTION 4. First aid measures

4.1 Description of first aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing.

After eye contact: rinse out with plenty of water.

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

irritant effects, narcosis, Nausea, Vomiting, cardiovascular disorders, collapse, Headache, insomnia, restlessness

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water, Carbon dioxide (CO2), Foam, Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Combustible.

Vapours are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

Development of hazardous combustion gases or vapours possible in the event of fire.

Pay attention to flashback.

Fire may cause evolution of:

nitrogen oxides

5.3 Advice for firefighters

Special protective equipment for firefighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid substance contact. Do not breathe vapours, aerosols. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Do not empty into drains. Risk of explosion.

according to Regulation (EC) No. 1907/2006

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6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10).

Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up

affected area.

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Observe label precautions.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed.

Store at +15°C to +25°C.

The data applies to the entire pack.

7.3 Specific end use(s)

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

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection

Safety glasses

Hand protection

splash contact:

Glove material: butyl-rubber

according to Regulation (EC) No. 1907/2006

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Glove thickness: 0,7 mm Break through time: > 240 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 898 Butoject® (splash contact). This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Other protective equipment

Flame retardant antistatic protective clothing

Respiratory protection

required when vapours/aerosols are generated.

Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds. The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental exposure controls

Do not empty into drains.

Risk of explosion.

SECTION 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form liquid

Colour colourless

Odour pyridine-like

Odour Threshold No information available.

pH No information available.

Melting point No information available.

Boiling point No information available.

Flash point ca. 36 °C

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

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Relative vapour density No information available.

Relative density 1,17 g/cm³

at 20 °C

Water solubility at 20 °C

soluble

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

none

SECTION 10. Stability and reactivity

10.1 Reactivity

Vapour/air-mixtures are explosive at intense warming.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Risk of explosion with:

halogens, Strong oxidizing agents, peroxi compounds, Nitric acid, with, conc. sulfuric acid,

hydrogen peroxide, perchlorates, Nitriles

Risk of ignition or formation of inflammable gases or vapours with:

potassium permanganate, halogen oxides, hydrides, chromium(VI) oxide

Exothermic reaction with:

Oxides of phosphorus

10.4 Conditions to avoid

Heating.

10.5 Incompatible materials

no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

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SECTION 11. Toxicological information

11.1 Information on toxicological effects Mixture

Acute oral toxicity

Acute toxicity estimate: 3.182 mg/kg

Calculation method

Symptoms: Vomiting, gastric pain, Diarrhoea

Acute inhalation toxicity

Acute toxicity estimate: 39,29 mg/l; vapour

Calculation method

Acute dermal toxicity

Acute toxicity estimate: 4.004 mg/kg

Calculation method

Skin irritation

This information is not available.

Eye irritation

This information is not available.

Sensitisation

This information is not available.

Germ cell mutagenicity

This information is not available.

Carcinogenicity

This information is not available.

Reproductive toxicity

This information is not available.

Teratogenicity

This information is not available.

Specific target organ toxicity - single exposure

This information is not available.

Specific target organ toxicity - repeated exposure

This information is not available.

Aspiration hazard

This information is not available.

11.2 Further information

Systemic effects:

If swallowed

Headache, restlessness, insomnia, cardiovascular disorders, Circulatory collapse

In high doses:

narcosis

Chronic uptake results in damage of:

Liver, Kidney

Good warning effect due to low odour threshold.

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

Components

according to Regulation (EC) No. 1907/2006

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Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Pyridine

Acute oral toxicity

LD50 rat: 891 mg/kg (RTECS)

Acute inhalation toxicity LC50 rat: 17,75 mg/l; 4 h

US-EPA

Acute dermal toxicity

LD50 rabbit: 1.121 mg/kg (RTECS)

Skin irritation

rabbit

Result: slight irritation

(RTECS)

Eye irritation

rabbit

Result: Severe irritations

(Lit.)

Sensitisation

Sensitisation test: guinea pig

Result: negative

(Lit.)

Germ cell mutagenicity Genotoxicity in vivo

Mutagenicity (mammal cell test): micronucleus.

Result: negative

(National Toxicology Program)

Mutagenicity (mammal cell test): chromosome aberration.

Result: negative

(National Toxicology Program)

Genotoxicity in vitro

Ames test Result: negative

(Lit.)

Teratogenicity

Did not show teratogenic effects in animal experiments. (External MSDS)

SECTION 12. Ecological information

Mixture

12.1 Toxicity

No information available.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

No information 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

Discharge into the environment must be avoided.

according to Regulation (EC) No. 1907/2006

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Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

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Components

Pyridine

Toxicity to fish

LC50 Oncorhynchus mykiss (rainbow trout): 4,6 mg/l; 96 h (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates

EC5 E.sulcatum: 3,5 mg/l; 72 h (Lit.) (maximum permissible toxic concentration)

EC50 Daphnia magna (Water flea): 240 mg/l; 24 h (ECOTOX Database)

Toxicity to algae

IC5 Scenedesmus quadricauda (Green algae): 120 mg/l; 7 d (Lit.) (maximum permissible toxic concentration)

Toxicity to bacteria

EC5 Pseudomonas putida: 340 mg/l; 16 h (Lit.) (maximum permissible toxic concentration)

SECTION 13. Disposal considerations

Waste treatment methods

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

14. Transport information

Land transport (ADR/RID)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

yes

14.3 Class 9

14.4 Packing group

14.5 Environmentally hazardous --

14.6 Special precautions for

user

Tunnel restriction code E

Inland waterway transport (ADN)

Not relevant

Air transport (IATA)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9

14.4 Packing group

14.5 Environmentally hazardous -

14.6 Special precautions for no

user

Sea transport (IMDG)

14.1 UN number UN 3316

14.2 Proper shipping name CHEMICAL KIT

14.3 Class 9
14.4 Packing group III

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-3

14.5 Environmentally hazardous --

14.6 Special precautions for

yes

user

EmS F-A S-P

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

Not relevant

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

SECTION 15. Regulatory information

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

EU regulations

Major Accident Hazard

96/82/EC

Legislation Flammable.

6

Quantity 1: 5.000 t Quantity 2: 50.000 t

Occupational restrictions

Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work

of pregnant workers.

Regulation (EC) No 1005/2009 on substances that

deplete the ozone layer

not regulated

Regulation (EC) No 850/2004 of the European

Parliament and of the Council of 29 April 2004 on

persistent organic pollutants and amending

Directive 79/117/EEC

not regulated

Regulation (EC) No 689/2008 concerning the export not regulated and import of dangerous chemicals

Substances of very high concern (SVHC)

This product does not contain substances of very high concern above the respective regulatory limit (> 0.1 % (w/w) Regulation (EC) No 1907/2006 (REACH), Article 57).

National legislation

Storage class

The data applies to the entire pack.

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.

H225 Highly flammable liquid and vapour. H226 Flammable liquid and vapour.

H302 Harmful if swallowed.
H312 Harmful in contact with skin.

ns 12 narmiul in contact with skin.

according to Regulation (EC) No. 1907/2006

Catalogue No. 118457

Product name Cyanide Test Refill pack for 114798, 114429, 114417 MColortest™

CN-3

H332 Harmful if inhaled.

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

R10 Flammable. R11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

Training advice

Provide adequate information, instruction and training for operators.

Labelling (67/548/EEC or 1999/45/EC)

Symbol(s) Xn Harmful

R-phrase(s) 10-20/21/22 Flammable. Harmful by inhalation, in contact with skin and if

swallowed.

S-phrase(s) 36/37 Wear suitable protective clothing and gloves.

Reduced labelling (≤125 ml)

Symbol(s) Xn Harmful

R-phrase(s) 10-20/21/22 Flammable. Harmful by inhalation, in contact with skin and if

swallowed.

S-phrase(s) 36/37 Wear suitable protective clothing and gloves.

Contains: Pyridine

Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Regional representation

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