

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 05/22/2019

Version1.2

SECTION 1.Identification

Product identifier

Catalog No. 110044

Product name Cyanide Test Method: colorimetric with test strips and

reagents 1 - 3 - 10 - 30 mg/I CN- MQuant®

CN-1

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

Identified uses Reagent for analysis

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 400 Summit Drive | Burlington |

Massachusetts 01803 | United States of America | General Inquiries: +1 800-645-5476 | Monday to Friday, 9:00 AM to

4:00 PM Eastern Time (GMT-5)

MilliporeSigma is a business of Merck KGaA, Darmstadt,

Germany.

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS Classification

Skin irritation, Category 2, H315 Eye irritation, Category 2A, H319

Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system,

H335

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

GHS-Labeling

Millipore SigMa

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Hazard pictograms



Signal Word Warning

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statements

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

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

P312 Call a POISON CENTER/doctor if you feel unwell.

P321 Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Chemical nature Mixture of inorganic compounds

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Hazardous ingredients

Chemical name (Concentration)

CAS-No.

tri-sodium phosphate (>= 30 % - < 50 %)

7601-54-9

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin

with water/ shower.

Eye contact

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

contact lenses.

Ingestion

After swallowing: immediately make victim drink water (two glasses at most).

Consult a physician.

Most important symptoms and effects, both acute and delayed

irritant effects, Cough, Shortness of breath

gastric pain, Vomiting

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

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.

Special hazards arising from the substance or mixture

Not combustible.

Ambient fire may liberate hazardous vapors.

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Fire may cause evolution of:

Oxides of phosphorus

Advice for firefighters

Special protective equipment for fire-fighters

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/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

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.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed. Keep in a well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at $+15^{\circ}$ C to $+25^{\circ}$ C ($+59^{\circ}$ F to $+77^{\circ}$ F).

The data applies to the entire pack.



according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

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SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

Eye/face protection

Safety glasses

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Other protective equipment:

protective clothing

Respiratory protection

required when dusts are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

Physical state solid

Color off-white

Odor odorless

Odor Threshold Not applicable

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pH ca. 7

at 10 g/l

68 °F (20 °C)

Melting point No information available.

Boiling point No information available.

Flash point Not applicable

Evaporation rate No information available.

Flammability (solid, gas) The product is not flammable.

Lower explosion limit Not applicable

Upper explosion limit Not applicable

Vapor pressure No information available.

Relative vapor density No information available.

Density No information available.

Relative density No information available.

Water solubility at 68 °F (20 °C)

soluble

Partition coefficient: n-

octanol/water

No information available.

Autoignition temperature Not applicable

 $\label{lem:decomposition} \mbox{Decomposition temperature} \quad \mbox{No information available}.$

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

Ignition temperature Not applicable



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SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

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

Possibility of hazardous reactions

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

Aluminum, Zinc, zinc alloys

Violent reactions possible with:

Strong acids

Conditions to avoid

no information available

Incompatible materials

various plastics, Light metals

Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Acute oral toxicity

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus

and gastrointestinal tract., gastric pain, Vomiting

Acute inhalation toxicity

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:,

damage of respiratory tract

Skin irritation

Mixture causes skin irritation.

Eye irritation

Mixture causes serious eye irritation.

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Specific target organ systemic toxicity - single exposure

May cause respiratory irritation. Target Organs: Respiratory system

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC No ingredient of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater

than or equal to 0.1% is on OSHA's list of regulated

carcinogens.

NTP No ingredient of this product present at levels greater

than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

ACGIH No ingredient of this product present at levels greater

than or equal to 0.1% is identified as a carcinogen or

potential carcinogen by ACGIH.

Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components

tri-sodium phosphate

Acute oral toxicity

LD50 Rat: > 2,000 mg/kg OECD Test Guideline 420

Acute inhalation toxicity

LC50 Rat: > 0.83 mg/l; 4 h; dust/mist The value is given in analogy to the following substances:

OECD Test Guideline 403

Sensitization

Sensitization test: Mouse

Result: negative

Method: OECD Test Guideline 429

The value is given in analogy to the following substances:

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SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

Depending on the concentration, phosphates may contribute to the eutrophication of water supplies.

Discharge into the environment must be avoided.

Components

tri-sodium phosphate

Toxicity to fish

LC0 Leuciscus idus (Golden orfe): ca. 2,400 mg/l; 48 h

OECD Test Guideline 203

Biodegradability

The methods for determining the biological degradability are not applicable to inorganic substances.

PBT/vPvB: Not applicable for inorganic substances

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

UN number UN3316

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Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Air transport (IATA)

UN number UN 3316

Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Special precautions for

user

Sea transport (IMDG)

UN number UN 3316

Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Special precautions for yes

user

EmS F-A S-P

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.



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SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Components

tri-sodium phosphate

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Components

tri-sodium phosphate

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Components

tri-sodium phosphate

Pennsylvania Right To Know

Components

tri-sodium phosphate

New Jersey Right To Know

Components

tri-sodium phosphate

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA: All components of the product are listed in the TSCA-

inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

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Labeling

Hazard pictograms



Signal Word Warning

Hazard Statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

Precautionary Statements

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

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.

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

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

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.

Revision Date05/22/2019

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.



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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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SECTION 1.Identification

Product identifier

Catalog No. 110044

Product name Cyanide Test Method: colorimetric with test strips and

reagents 1 - 3 - 10 - 30 mg/l CN- MQuant®

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

Identified uses Reagent for analysis

Details of the supplier of the safety data sheet

Company EMD Millipore Corporation | 400 Summit Drive | Burlington |

Massachusetts 01803 | United States of America | General Inquiries: +1 800-645-5476 | Monday to Friday, 9:00 AM to

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Germany.

Emergency telephone 800-424-9300 CHEMTREC (USA)

+1-703-527-3887 CHEMTREC (International)

24 Hours/day; 7 Days/week

SECTION 2. Hazards identification

GHS Classification

Flammable liquid, Category 3, H226 Skin corrosion, Category 1B, H314 Serious eye damage, Category 1, H318 Respiratory sensitization, Category 1, H334

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

GHS-Labeling

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Hazard pictograms







Signal Word Danger

Hazard Statements

H226 Flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P285 In case of inadequate ventilation wear respiratory protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

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

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

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None known.

SECTION 3. Composition/information on ingredients

Chemical nature Aqueous solution of organic compounds.

Hazardous ingredients

Chemical name (Concentration)

CAS-No.

Pyridine (>= 10 % - < 30 %)

110-86-1

Chloramine T (>= 5 % - < 10 %)

127-65-1

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

General advice

First aider needs to protect himself.

Inhalation

After inhalation: fresh air. Call in physician.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin

with water/ shower. Call a physician immediately.

Eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

Ingestion

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation!). Call a physician immediately. Do not attempt to neutralize.

Most important symptoms and effects, both acute and delayed

Irritation and corrosion, Allergic reactions, Cough, Shortness of breath

Risk of blindness!

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

Indication of any immediate medical attention and special treatment needed

No information available.

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SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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

Unsuitable extinguishing media

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

Special hazards arising from the substance or mixture

Mixture with combustible ingredients.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air at elevated temperatures.

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

Fire may cause evolution of:

nitrogen oxides

Advice for firefighters

Special protective equipment for fire-fighters

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

Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. 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.

Environmental precautions

Do not let product enter drains. Risk of explosion.

Methods and materials for containment and cleaning up



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Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Work under hood. Do not inhale substance/mixture. Avoid generation of vapors/aerosols.

Advice on protection against fire and explosion

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

Conditions for safe storage, including any incompatibilities

Tightly closed. Keep in a well-ventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at $+15^{\circ}$ C to $+25^{\circ}$ C ($+59^{\circ}$ F to $+77^{\circ}$ F).

The data applies to the entire pack.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Components

Basis Value Threshold Remarks

limits

Pyridine (110-86-1)

ACGIH Time Weighted 1 ppm

Average (TWA):

NIOSH/GUIDE Recommended 5 ppm

exposure limit (REL): 15 mg/m³

OSHA_TRANS PEL: 5 ppm

15 mg/m³

Z1A Time Weighted 5 ppm

Average (TWA): 15 mg/m³

Engineering measures



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Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

Eye/face protection

Tightly fitting safety goggles

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Other protective equipment:

Flame retardant antistatic protective clothing.

Respiratory protection

required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

Physical state liquid

Color colorless

Odor characteristic

Odor Threshold No information available.

pH No information available.

Melting point No information available.

Boiling point No information available.

Flash point 108 °F (42 °C)



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Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Vapor pressure No information available.

Relative vapor density No information available.

Density 1.04 g/cm3

at 68 °F (20 °C)

Relative density No information available.

Water solubility at 68 °F (20 °C)

soluble

Partition coefficient: n-

Autoignition temperature

octanol/water

No information available.

No information available.

Decomposition temperature No information available.

Viscosity, dynamic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

SECTION 10. Stability and reactivity

Reactivity

Vapor/air-mixtures are explosive at intense warming.

Chemical stability

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

Possibility of hazardous reactions

Risk of explosion with:

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perchloric acid, nitrogen oxides, halogen-halogen compounds

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

chlorosulfonic acid, chromium(VI) oxide, Acid anhydrides, fuming sulfuric acid,

Oxidizing agents, perchromates, Nitric acid, nitrogen dioxide

Exothermic reaction with:

Fluorine, sulfuric acid, silver perchlorate

Conditions to avoid

Heating.

Incompatible materials

rubber, various plastics, various metals

Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure Eye contact, Skin contact Target Organs

Eyes

Skin

Central nervous system

Liver

Kidneys

gastrointestinal tract

Acute oral toxicity

Acute toxicity estimate: > 2,000 mg/kg

Calculation method

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the esophagus and the stomach., Nausea, Vomiting

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Acute inhalation toxicity

Acute toxicity estimate: > 20 mg/l; 4 h

Calculation method

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:,

damage of respiratory tract

Acute dermal toxicity

Acute toxicity estimate: > 2,000 mg/kg

Calculation method

Skin irritation

Mixture causes burns.

Eye irritation

Mixture causes serious eye damage. Risk of blindness!

Sensitization

Mixture may cause allergy or asthma symptoms or breathing difficulties if inhaled.

Specific target organ systemic toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ systemic toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC No ingredient of this product present at levels greater

than or equal to 0.1% is identified as probable, possible

or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater

than or equal to 0.1% is on OSHA's list of regulated

carcinogens.

NTP No ingredient of this product present at levels greater

than or equal to 0.1% is identified as a known or

anticipated carcinogen by NTP.

ACGIH Confirmed animal carcinogen with unknown relevance to

humans.

Pyridine 110-86-1

Further information

Systemic effects:

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

Product name Cyanide Test Method: colorimetric with test strips and reagents 1 - 3 -

10 - 30 mg/l CN- MQuant®

CN-2

After uptake:

Headache, restlessness, insomnia

In high doses:

narcosis, cardiovascular disorders, Circulatory collapse

Chronic uptake results in damage of:

Liver, Kidney

Good warning effect due to low odor threshold.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Components

Pyridine

Acute oral toxicity

LD50 Rat: ca. 1,500 mg/kg (ECHA)

Acute inhalation toxicity

LC50 Rat: 17.1 mg/l; 4 h; vapor

US-EPA

Acute dermal toxicity

LD50 Rabbit: > 1,000 - 2,000 mg/kg

OECD Test Guideline 402

Sensitization

Sensitization test: Guinea pig

Result: negative

(Lit.)

Germ cell mutagenicity Genotoxicity in vivo

Micronucleus test

Mouse

Result: negative

Method: OECD Test Guideline 475

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

In vitro mammalian cell gene mutation test

Chinese hamster lung cells

Result: negative

Method: OECD Test Guideline 476

Teratogenicity

Did not show teratogenic effects in animal experiments.

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

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Chloramine T

Acute oral toxicity

Acute toxicity estimate: 500.1 mg/kg

Expert judgment

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Additional ecological information

Discharge into the environment must be avoided.

Components

Pvridine

Toxicity to fish

flow-through test LC50 Pimephales promelas (fathead minnow): 99 mg/l; 96 h

Analytical monitoring: yes(ECHA)

Toxicity to daphnia and other aquatic invertebrates

EC5 E.sulcatum: 3.5 mg/l; 72 h (Lit.) (maximum permissible toxic concentration)

Toxicity to algae

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

concentration) (Lit.)

Toxicity to bacteria

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

Biodegradability 97 %; 28 d; aerobic OECD Test Guideline 301B Readily biodegradable.

Partition coefficient: n-octanol/water

log Pow: ca. 0.64 (20 °C)

(experimental)

(Lit.) Bioaccumulation is not expected.



according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

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Substance does not meets the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

Chloramine T

No information available.

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

UN number UN3316

Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Air transport (IATA)

UN number UN 3316

Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Special precautions for

user

Sea transport (IMDG)

UN number UN 3316
Proper shipping name CHEMICAL KIT

Class 9
Packing group III
Environmentally --

hazardous

Millipore SigMa

no

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

Product name Cyanide Test Method: colorimetric with test strips and reagents 1 - 3 -

10 - 30 mg/l CN- MQuant®

CN-2

Special precautions for yes

user

EmS F-A S-P

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

SECTION 15. Regulatory information

United States of America

SARA 313

The following components are subject to reporting levels established by SARA Title III. Section 313:

Components

Pyridine 110-86-1

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

Massachusetts Right To Know

Components

Pyridine

Pennsylvania Right To Know

Components

Pyridine

New Jersey Right To Know

Components

Pyridine

California Prop 65 Components

WARNING: this product contains a chemical known in the State of California to cause cancer.

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according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

Product name Cyanide Test Method: colorimetric with test strips and reagents 1 - 3 -

10 - 30 mg/l CN MQuant®

CN-2

Components Pyridine

Notification status

TSCA: All components of the product are listed in the TSCA-

inventory.

DSL: All components of this product are on the Canadian DSL

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms







Signal Word Danger

Hazard Statements

H226 Flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statements

Prevention

P210 Keep away from heat.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

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

P308 + P310 IF exposed or concerned: immediately call a POISON CENTER or doctor/physician.



according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number 110044 Version1.2

Product name Cyanide Test Method: colorimetric with test strips and reagents 1 - 3 -

10 - 30 mg/I CN- MQuant®

CN-2

Full text of H-Statements referred to under sections 2 and 3.

H226 Flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing

difficulties if inhaled.

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.

Revision Date05/22/2019

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