

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

Revision Date 03/08/2018

Version 1.3

SISECTION 1.Identification

Product identifier

Product number 101340

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

CAS-No. 573-58-0

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 | 290 Concord Road, Billerica, MA 01821,

United States of America | General Inquiries: +1-978-715-4321 | 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

Carcinogenicity, Category 1B, H350 Reproductive toxicity, Category 2, H361

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

GHS-Labeling

Hazard pictograms



Signal Word
Danger

Hazard Statements

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements

P201 Obtain special instructions before use.

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

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

Formula $C_{32}H_{22}N_6Na_2O_6S_2$ (Hill)

Molar mass 696.68 g/mol

Hazardous ingredients

Chemical name (Concentration)

CAS-No.

C.I. Direct Red 28 (>= 90 % - <= 100 %)

573-58-0

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. Consult a physician.

Eye contact

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

Inaestion

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

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Tiredness

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

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

Combustible.

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

Fire may cause evolution of: nitrogen oxides, Sulfur 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

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 generation and inhalation of dusts in all circumstances. 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 carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Work under hood. Do not inhale substance/mixture.

Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Protected from light.

Store at +5°C to +30°C (+41°F to +86°F).

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

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

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

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).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. 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

Respiratory protection

required when dusts are generated.

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances

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

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

SECTION 9. Physical and chemical properties

Physical state solid

Color red brown

Odor characteristic

Odor Threshold No information available.

ca. 6.7 Ηq

at 10 g/l

68 °F (20 °C)

Melting point > 680 °F (> 360 °C)

Boiling point No information available.

No information available. Flash point

Evaporation rate No information available.

Flammability (solid, gas) No information available.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapor pressure < 1 Pa

Relative vapor density No information available.

Density No information available.

Relative density No information available.

Water solubility 25 g/l

at 68 °F (20 °C)

log Pow: 2.63

Partition coefficient: n-

octanol/water (calculated)

Bioaccumulation is not expected. (Lit.)

Autoignition temperature No information available.

Decomposition temperature No information available.

No information available. Viscosity, dynamic

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

Explosive properties Not classified as explosive.

Oxidizing properties none

Bulk density ca.600 - 700 kg/m3

SECTION 10. Stability and reactivity

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.

Chemical stability

Sensitivity to light

Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents, Strong acids

Conditions to avoid

no information available

Incompatible materials

no information available

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

LD50 Rat: 15,200 mg/kg (HSDB)

Eye irritation

Rabbit

Result: No eye irritation

(HSDB)

CMR effects

Carcinogenicity: May cause cancer.

Teratogenicity / Reproductive toxicity: Suspected of damaging fertility or the unborn child.

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.

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

Aspiration hazard

Regarding the available data the classification criteria are not fulfilled.

Carcinogenicity

IARC Group 2A: Probably carcinogenic to humans

C.I. Direct Red 28 573-58-0

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

egual to 0.1% is identified as a carcinogen or potential

carcinogen by ACGIH.

Further information

After absorption:

In animal experiments:

Tiredness, Changes in the blood count

Toxic effect on:

Lungs

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to daphnia and other aquatic invertebrates

static test LC50 Daphnia magna (Water flea): 4 mg/l; 48 h (ECOTOX Database)

Persistence and degradability

No information available.

Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 2.63 (calculated)

Bioaccumulation is not expected. (Lit.)

Mobility in soil

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.

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

SECTION 14. Transport information

Land transport (DOT)

UN number UN 2811

Proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (DISODIUM-3,3'-((1,1-

BIPHENYL)-4,4'-DIYLBIS(AZO)) BIS (4-AMINONAPHTHALENE-1-SULFONATE))

Class 6.1
Packing group III
Environmentally hazardous --

Air transport (IATA)

UN number UN 2811

Proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (DISODIUM-3,3'-((1,1-

BIPHENYL)-4,4'-DIYLBIS(AZO)) BIS (4-AMINONAPHTHALENE-1-SULFONATE))

Class 6.1
Packing group III
Environmentally hazardous -Special precautions for user no

Sea transport (IMDG)

UN number UN 2811

Proper shipping name TOXIC SOLID, ORGANIC, N.O.S. (DISODIUM-3,3'-((1,1-

BIPHENYL)-4,4'-DIYLBIS(AZO)) BIS (4-AMINONAPHTHALENE-1-SULFONATE))

Class 6.1
Packing group III
Environmentally hazardous -Special precautions for user
EmS F-A S-A

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.

SARA 302

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

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

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

TSCA 12b

Ingredients

C.I. Direct Red 28 573-58-0

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

California Prop 65 Components

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

Ingredients

C.I. Direct Red 28

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

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

Product number 101340 Version 1.3

Product name Congo red (C.I. 22120) indicator Reag. Ph Eur

Hazard Statements

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

Precautionary Statements

Prevention

P201 Obtain special instructions before use.

Response

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Restricted to professional users.

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

H350 May cause cancer.

H361 Suspected of damaging fertility or the unborn child.

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 Date03/08/2018

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.

All rights reserved. Millipore and the "M" Mark are registered trademarks of Merck KGaA, Darmstadt, Germany.