



SAFETY DATA SHEET

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

Revision Date 06/25/2014

Version 1.3

SECTION 1. Identification

Product identifier

Product number	107233
Product name	Phenolphthalein indicator ACS, Reag. Ph Eur
CAS-No.	77-09-8

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

Identified uses	Reagent for analysis
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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)
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Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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SECTION 2. Hazards identification

GHS Classification

Carcinogenicity, Category 1B, H350
Germ cell mutagenicity, Category 2, H341
Reproductive toxicity, Category 2, H361f

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.
H341 Suspected of causing genetic defects.
H361f Suspected of damaging fertility.

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

Product name Phenolphthalein indicator ACS, Reag. Ph Eur

Precautionary Statements

P201 Obtain special instructions before use.

P260 Do not breathe dust.

P281 Use personal protective equipment as required.

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

Restricted to professional users.

OSHA Hazards

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS and may deviate from the GHS information.

Other hazards

None known.

SECTION 3. Composition/information on ingredients

Formula $C_{20}H_{14}O_4$ (Hill)

Molar mass 318.32 g/mol

Hazardous ingredients

Chemical Name (Concentration)

CAS-No.

phenolphthalein ($\geq 90\%$ - $\leq 100\%$)

77-09-8

Exact percentages are being withheld as a trade secret.

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air. Call in physician.

Skin contact

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

Eye contact

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

Ingestion

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

Fever, Gastrointestinal disturbance, Nausea, Vomiting, cardiovascular disorders, CNS disorders

The substance has a laxative effect.

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

Product name Phenolphthalein indicator ACS, Reag. Ph Eur

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

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.

Special hazards arising from the substance or mixture

Combustible.

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

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

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 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.

Environmental precautions

Do not empty into 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

Work under hood. Do not inhale substance/mixture.

Observe label precautions.

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.

Storage temperature: no restrictions.

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

Product name Phenolphthalein indicator ACS, 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

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	white
Odor	odorless
Odor Threshold	not applicable
pH	No information available.
Melting point	263.7 °C Method: OECD Test Guideline 102
Boiling point/boiling range	> 842 °F (> 450 °C) Method: OECD Test Guideline 103
Flash point	not applicable

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

Product number	107233	Version 1.3
Product name	Phenolphthalein indicator ACS, Reag. Ph Eur	

Evaporation rate	No information available.
Flammability (solid, gas)	The product is not classified as highly combustible according to the Dangerous Goods Regulations. Flammability (solids) NF T 20-042
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	< 0.00001 Pa at 122 °F (50 °C) Method: OECD Test Guideline 104
Relative vapor density	No information available.
Density	1.296 g/cm ³ at 68 °F (20 °C) Method: OECD Test Guideline 109
Relative density	No information available.
Water solubility	3.36 mg/l at 68 °F (20 °C) Method: OECD Test Guideline 105
Partition coefficient: n-octanol/water	log Pow: 0.9 OECD Test Guideline 107 Bioaccumulation is not expected.
Autoignition temperature	747 °F (397 °C) Method: NF T 20-036
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none
Bulk density	350 - 450 kg/m ³
Particle size	Mean particle size 56.6 µm Method: OECD Test Guideline 110

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

Product name Phenolphthalein indicator ACS,Reag. Ph Eur

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

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

Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Conditions to avoid

no information available

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure

Eye contact, Skin contact, Ingestion

Skin irritation

Result: irritating

OECD Test Guideline 431

Eye irritation

Result: non-corrosive

OECD Test Guideline 437

Sensitization

Sensitization test: mouse

Result: negative

Method: OECD Test Guideline 429

Genotoxicity in vivo

Mutagenicity (mammal cell test): micronucleus.

mouse

Result: positive

(Lit.)

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Result: negative

(Lit.)

SAFETY DATA SHEET

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

Product number

107233

Version 1.3

Product name

Phenolphthalein indicator ACS, Reag. Ph Eur

Mutagenicity (mammal cell test): chromosome aberration.

Result: positive

(Lit.)

CMR effects

Carcinogenicity:

May cause cancer.

Mutagenicity:

Suspected of causing genetic defects.

Reproductive toxicity:

Suspected of damaging fertility.

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

Group 2B: Possibly carcinogenic to humans

phenolphthalein

77-09-8

OSHA

No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

Anticipated carcinogen.

phenolphthalein

77-09-8

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

After uptake of large quantities:

Nausea, Vomiting, Gastrointestinal disturbance, Fever, cardiovascular disorders, CNS disorders

The substance has a laxative effect.

This substance should be handled with particular care.

SECTION 12. Ecological information

Ecotoxicity

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): > 4.34 mg/l; 48 h

OECD Test Guideline 202

Toxicity to algae

Growth inhibition EbC50 Desmodesmus subspicatus (green algae): 2.5 mg/l; 72 h

OECD Test Guideline 201

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

Product name Phenolphthalein indicator ACS, Reag. Ph Eur

Growth inhibition ErC50 *Desmodesmus subspicatus* (green algae): > 3.33 mg/l; 72 h
OECD Test Guideline 201

Growth inhibition NOEC *Desmodesmus subspicatus* (green algae): 0.57 mg/l; 72 h
OECD Test Guideline 201

Persistence and degradability

Biodegradability

76 %; 28 d; aerobic

OECD Test Guideline 301F

The 10 day time window criterion is not fulfilled.

Readily biodegradable.

Bioaccumulative potential

Partition coefficient: n-octanol/water

log Pow: 0.9

OECD Test Guideline 107

Bioaccumulation is not expected.

Mobility in soil

No information available.

Other adverse effects

Surface tension

71.8 mN/m

at 68 °F (20 °C)

Method: OECD Test Guideline 115

Additional ecological information

Discharge into the environment must be avoided.

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)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. Regulatory information

United States of America

OSHA Hazards

SAFETY DATA SHEET

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

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107233

Version 1.3

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Carcinogen

Reproductive hazard

Mutagen

This information is based on 29 CFR 1910.1200 criteria prior to adoption of the GHS, and may deviate from the GHS information on the label and in section 2.

SARA 311/312 Hazards

Chronic Health Hazard

SARA 313

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

Ingredients

phenolphthalein

77-09-8

100 %

SARA 302

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.

DEA List I

Not listed

DEA List II

Not listed

US State Regulations

California Prop 65 Components

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

Ingredients

phenolphthalein

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.

SAFETY DATA SHEET

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

Product number 107233

Version 1.3

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

H341	Suspected of causing genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.

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 Date 06/25/2014

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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