according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

SECTION 1: Identification of the substance/mixture and of the supplier

Product name : Phenolphthalein,ACS

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: \$25466

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:

AquaPhoenix Scientific 9 Barnhart Drive, Hanover, PA 17331

Supplier Details:

Fisher Science Education 15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:

Fisher Science Education Emergency Telephone No.: 800-535-5053

SECTION 2: Hazards identification

Classification of the substance or mixture:



Health hazard

Carcinogenicity, category 1B Germ cell mutagenicity, category 2 Reproductive toxicity, category 2

Muta. 2: H341 Carc. 1B: H350 Repr. 2: H361f

HNOC: Combustible Dust

Signal word : Danger

Hazard statements:

Suspected of causing genetic defects

May cause cancer

Suspected of damaging fertility or the unborn child

Precautionary statements:

If medical advice is needed, have product container or label at hand

Keep out of reach of children

Read label before use

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

Obtain special instructions before use

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

Do not eat, drink or smoke when using this product

IF exposed or concerned: Get medical advice/attention

Store locked up

Dispose of contents/container to ...

Other Non-GHS Classification:

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Phenolphthalein, ACS

WHMIS

NFPA/HMIS





HMIS RATINGS (0-4)

SECTION 3: Composition/information on ingredients

Ingredients:		
CAS 77-09-8	Phenolphthalein	100 %
		Percentages are by weight

SECTION 4: First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists.

After skin contact: Wash affected area with soap and water. Rinse/flush exposed skin gently using water for 15-20 minutes. Seek medical attention if irritation persists or if concerned.

After eye contact: Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Have exposed individual drink sips of water. Seek medical attention if irritation, discomfort or vomiting persists.

Most important symptoms and effects, both acute and delayed:

Nausea, Headache, Shortness of breath. Irritation- all routes of exposure.;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: Water. Carbon dioxide. Dry chemical. If in laboratory setting, follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Combustion products may include carbon oxides or other toxic vapors. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion

Advice for firefighters:

Protective equipment:

Additional information (precautions): Move product containers away from fire or keep cool with water spray as a protective measure, where feasible.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Use respiratory protective device against the effects of fumes/dust/aerosol. Ensure adequate ventilation. Protect from heat. Stop the spill, if possible. Transfer to a disposal or recovery container.

Environmental precautions:

Prevent from reaching drains, sewer or waterway. Collect contaminated soil for characterization per Section 13

Methods and material for containment and cleaning up:

If in a laboratory setting, follow Chemical Hygiene Plan procedures. Place into properly labeled containers for recovery or disposal. If necessary, use trained response staff/contractor.

Reference to other sections:

SECTION 7: Handling and storage

Precautions for safe handling:

Follow good hygiene procedures when handling chemical materials. Do not eat, drink, smoke, or use personal products when handling chemical substances. If in a laboratory setting, follow Chemical Hygiene Plan. Use only in well ventilated areas. Wash hands after handling. Avoid contact with skin and eyes. Avoid generating dust. Avoid inhalation and ingestion. Use in a chemical fume hood

Conditions for safe storage, including any incompatibilities:

Provide ventilation for containers. Store away from foodstuffs. Store in cool, dry conditions in well sealed containers. Store with like hazards. Protect from freezing and physical damage

SECTION 8: Exposure controls/personal protection





Control Parameters: 77-09-8, Nuisance dust, ACGIH TLV TWA:10mg/m3 (inhalable particles)

77-09-8, Nuisance dust, OSHA PEL TWA: 15 mg/m3 (total dust)

Appropriate Engineering controls: Emergency eye wash fountains and safety showers should be available in

the immediate vicinity of use/handling.Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits (Occupational

Exposure Limits-OELs) indicated above.

Respiratory protection: Not required under normal conditions of use. Use suitable respiratory

protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills,

respiratory protection may be advisable.

according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

Protection of skin: The glove material has to be impermeable and resistant to the product/

the substance/ the preparation being used/handled. Selection of the glove material on consideration of the penetration times, rates of diffusion and

the degradation.

Eye protection: Safety glasses with side shields or goggles.

General hygienic measures: The usual precautionary measures are to be adhered to when handling

chemicals. Keep away from food, beverages and feed sources.

Immediately remove all soiled and contaminated clothing. Wash hands

before breaks and at the end of work. Do not inhale

gases/fumes/dust/mist/vapor/aerosols. Avoid contact with the eyes and

skin.

SECTION 9: Physical and chemical properties

Appearance (physical state,color):	Off White Powder	Explosion limit lower: Explosion limit upper:	Not Determined Not Determined	
Odor:	Odorless	Vapor pressure:	Not Determined	
Odor threshold:	Not Determined	Vapor density:	Not Determined	
pH-value:	Not Determined	Relative density:	1.299	
Melting/Freezing point:	260C	Solubilities:	Insoluble in water.	
Boiling point/Boiling range:	Not Determined	Partition coefficient (noctanol/water):	Not Determined	
Flash point (closed cup):	Not Determined	Auto/Self-ignition temperature:	Not Determined	
Evaporation rate:	2.88	Decomposition temperature:	Not Determined	
Flammability (solid,gaseous):	Not Determined	Viscosity:	a. Kinematic:Not Determined b. Dynamic: Not Determined	
Donsity: Not Determined	<u> </u>	-	-	

Density: Not Determined **Specific Gravity**: 1.299

SECTION 10: Stability and reactivity

Reactivity: Nonreactive under normal conditions.

Chemical stability: No decomposition if used and stored according to specifications.

Possible hazardous reactions: None under normal processing

Conditions to avoid:Incompatible Materials.Dust generation.excess heat. **Incompatible materials:**Strong acids.Strong bases.Strong oxidizing agents.

Hazardous decomposition products: Carbon oxides (CO, CO2).

SECTION 11: Toxicological information

Acute Toxicity: No additional information.

Chronic Toxicity: No additional information.

Corrosion Irritation: No additional information.

according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

Sensitization:	No additional information.
Single Target Organ (STOT):	No additional information.
Numerical Measures:	No additional information.
Carcinogenicity:	IARC : Group 2B (Possibly Carcinogenic to Humans) - Monograph 76 [2000] (Phenolphthalein 77-09-8) NTP (National Toxicology Program) : Evidence of Carcinogenicity- Clear Evidence (TR-465) Male Rat - Clear Evidence; Female Rat - Some Evidence; Male Mice - Clear Evidence; Female Mice (Phenolphthalein 77-09-8) NTP (National Toxicology Program) : Reasonably Anticipated To Be A Human Carcinogen (Phenolphthalein 77-09-8) OSHA - Hazard Communication Carcinogens (list): Present (Phenolphthalein 77-09-8)
Mutagenicity:	No additional information.
Reproductive Toxicity:	No additional information.

SECTION 12: Ecological information

Ecotoxicity

Daphnia magna: EC50 Effect conc. > 100 mg/L

Desmodesmus subspicatus EC50: Effect conc. 8.9 mg/L

Persistence and degradability: Readily degradable in the environment.

Bioaccumulative potential:

Mobility in soil: Aqueous solution has high mobility in soil.

Other adverse effects:

SECTION 13: Disposal considerations

Waste disposal recommendations:

Product/containers must not be disposed together with household garbage. Do not allow product to reach sewage system or open water. It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Consult federal state/provincial and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

UN-Number

Not Dangerous Goods

UN proper shipping name

Not Dangerous Goods

Transport hazard class(es)

Packing group: Not Dangerous Goods

Environmental hazard: Transport in bulk:

Special precautions for user:

SECTION 15: Regulatory information

according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

United States (USA)

SARA Section 311/312 (Specific toxic chemical listings):

Chronic

SARA Section 313 (Specific toxic chemical listings):

77-09-8 Phenolphthalein 0.1 % de minimis concentration

RCRA (hazardous waste code):

None of the ingredients is listed

TSCA (Toxic Substances Control Act):

All ingredients are listed.

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):

None of the ingredients is listed

Proposition 65 (California):

Chemicals known to cause cancer:

77-09-8 Phenolphthalein

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed

Chemicals known to cause developmental toxicity:

None of the ingredients is listed

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRI Ingredient Disclosure list (limit 0.1%):

None of the ingredients is listed

Canadian NPRI Ingredient Disclosure list (limit 1%):

None of the ingredients is listed

SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.Note:. The responsibility to provide a safe workplace remains with the user.The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment.The information contained herein is, to the best of our knowledge and belief, accurate.However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material.It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

GHS Full Text Phrases:

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

PNEC: Predicted No-Effect Concentration (REACH)

according to 29CFR1910/1200 and GHS Rev. 3

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Phenolphthalein, ACS

CFR: Code of Federal Regulations (USA)

SARA: Superfund Amendments and Reauthorization Act (USA)

RCRA: Resource Conservation and Recovery Act (USA)

TSCA: Toxic Substances Control Act (USA)

NPRI: National Pollutant Release Inventory (Canada)

DOT: US Department of Transportation IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

Effective date: 01.08.2015 **Last updated**: 03.23.2015



Sodium Carbonate, 10%

01. Product and Company Identification

Product Identifier:

Trade Name: Sodium Carbonate, 10% Solution **Chemical Name:** Sodium Carbonate, 10% solution

Catalog Number: 35071504, 35071555

Kit Number: 35070001, 35070303, 35070401

Use of chemical: Laboratory chemical

Identification of Manufacturer:

Manufacturer/Supplier: Biochemical Diagnostics, Inc.

180 Heartland Blvd., Edgewood, NY 11717 Phone: (631) 595-9200 | Fax: (631) 595-9204

Emergency telephone number: (800) 255-3924

02. Hazard(s) Identification

Classification of substance or mixture:

Skin irritation (Category 3) / Eye irritation (Category 2B) Causes mild skin irritation. Causes eye irritation.

Label elements:

N/A

Signal word: Warning

Hazard statements:

H316 Causes mild skin irritation. H320 Causes eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after handling.

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

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332+P313 IF SKIN IRRITATION OCCURS: Get medical advice/attention.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 2

Fire = 0

Reactivity = 0

03. Composition/information on ingredients

Chemical Characterization: Solution

CAS No. Description: 497-19-8

Formula: Mixture of: Na₂CO₃, 10% in Water



Sodium Carbonate, 10%

04. First aid measures

Description of first aid measures:

Inhalation: Remove to fresh air.

Ingestion: Rinse mouth with water. If symptoms persist seek medical attention. **Skin Contact:** Wash with soap and water. If symptoms persist consult a physician.

Eye Contact: Rinse with thoroughly with plenty of water for at least 15 minutes. If symptoms

persist, seek medical attention.

05. Firefighting measures

Extinguishing media: Water, dry chemical, or carbon dioxide.

Special Fire Fighting Procedures: Standard firefighting procedure/gear.

Unusual Fire and Explosion Hazards: N/A

06. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Wear protective equipment.

Environmental precautions:

N/A

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders) and remove. Neutralize the residue with a dilute solution of acetic acid. Finish cleaning by spreading water on the contaminated surface.

Waste Disposal Method:

Dispose in accordance with state, local and federal regulations

07. Handling and storage

Handling:

Precautions for safe handling: Do not ingest. Do not breathe gas/fumes/ vapor/spray.

Information about protection against explosions and fires: N/A

Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: Keep container tightly closed.

Further information about storage conditions: Keep container in a cool, well-ventilated area.

08. Exposure controls/ personal protection

Exposure Controls:

Control parameters:

Components with limit values that require monitoring at the workplace:

Contains no substances with occupational exposure limit values.

Personal protective equipment:

General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.



Sodium Carbonate, 10%

Eye Protection:



Tightly sealed goggles

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat,

apron or coveralls, as appropriate, to prevent skin contact

Protection of Hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Respiratory Protection: None required.

Ventilation: Keep vapor levels as low as possible, use adequate general or local exhaust.

09. Physical and chemical properties

Appearance: Form: Liquid

Color: Colorless

Odor: None pH: 12

Melting Point: 851°C (°F)

Boiling Point: 110°C (2575°F) with Decomposition

Flash Point: N/A

Ignition temperature: N/A

Explosion limits: Lower: N/A

Upper: N/A

Vapor Pressure @ 19°C: N/A

Specific Gravity @ 20°C (68°F): Approximately 1.15-1.25 g/cm³

Vapor Density: N/A
Percent Volatile: N/A
Evaporation Rate: N/A

Flammable Limits in air % by volume: Lel: N/A

Uel: N/A

Solubility in/ Miscibility with Water@20°C: Miscible

10. Stability and reactivity

Stability: Stable

Incompatibility: Phosphorus Pentoxide, Sulfuric acid, Zinc, Lithium, moisture, Calcium Hydroxide, and 2,4,5 Trinitroluene. Reacts strongly with acids to form carbon dioxide. Reacts explosively with red-hot aluminum metal. Sodium carbonate + ammonia in arabic gum solution will explode.

(Sodium Carbonate)

Conditions to Avoid: None documented.

Hazardous Polymerization: Will not occur

Hazardous Decomposition: Hydrogen chloride



Sodium Carbonate, 10%

11. Toxicological information

Acute toxicity:

LD/LC50 values that are relevant for classification: Sodium Carbonate

Oral LD50 4090 mg/kg (rat)

Vapor LC50 800 mg/m3 (Guinea pig)

Potential health effects:

On the skin: May cause skin irritation. On the eye: May cause eye irritation.

Ingestion: May cause irritation of digestive tract.

Inhalation: May cause respiratory tract and mucous membrane irritation.

Sensitization: No sensitizing effects known.

12. Ecological information

Toxicity: No data available.

Persistence and degradability: No data available. **Bioaccumulative potential:** No data available.

Mobility in soil: No data available.

Other adverse effects: No data available.

13. Disposal considerations

Waste treatment methods

Product:

Dispose of waste in accordance to applicable national, regional, or local regulations.

Contaminated packaging:

Disposal must be made according to official regulations.

14. Transport Information

Not dangerous goods

15. Regulatory Information

SARA 302 Components:

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

SARA 313 Components:

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 311/312 Hazards:

No data available



Sodium Carbonate, 10%

16. Other Information		
Revision B, June 2015		

The information contained herein is provided in good faith and is believed to be correct as of the date hereof. However, we make no representation as to the comprehensiveness or accuracy of the information. It is expected that individuals receiving the information will exercise their independent judgment in determining its appropriateness for a particular purpose. Accordingly, we will not be responsible for damages of any kind resulting from the use of or reliance upon such information.

No representations, or warranties, either express or implied of merchantability fitness for a particular purpose or of any other nature made hereunder with respect to the information set forth herein or to the product which the information refers.

FLINN SCIENTIFIC, INC. Safety Data Sheet (SDS)

SDS #: 665.80

Revision Date: January 16, 2014

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Red Cabbage Extract, Universal Indicator

Flinn Scientific, Inc. P.O. Box 219, Batavia, IL 60510 (800) 452-1261

CHEMTREC Emergency Phone Number: (800) 424-9300 Signal Word N/A Pictograms

SECTION 2 — HAZARDS IDENTIFICATION

This chemical is considered nonhazardous according to GHS classifications for the Hazard Communication Standard. Treat all laboratory chemicals with caution.

Although this material is considered to be nonhazardous, unpredictable reactions among chemicals are always possible. Prudent laboratory practices should be observed.

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

Component Name	CAS Number	Formula	Formula Weight	Concentration
Red cabbage extract, universal indicator	None established	Proprietary	Proprietary	Proprietary

SECTION 4 — FIRST AID MEASURES

Call a POISON CENTER or physician if you feel unwell.

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing.

If on skin: Wash with plenty of water.

If swallowed: Rinse mouth. Call a POISON CENTER or physician if you feel unwell.

SECTION 5 — FIRE FIGHTING MEASURES

Combustible solid.

When heated to decomposition, may emit toxic fumes.

NFPA CODE

None established

In case of fire: Use a tri-class dry chemical fire extinguisher.

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Sweep up, place in sealed bag or container and dispose. Ventilate area and wash spill site after material pickup is complete. See Sections 8 and 13 for further information.

Red Cabbage Extract, Universal Indicator

SDS #: 665.80

Revision Date: January 16, 2014

SECTION 7 — HANDLING AND STORAGE

Flinn Suggested Chemical Storage Pattern: Organic Miscellaneous. Store with miscellaneous organic substances. Keep container tightly closed. Store in a cool, dry place.

SECTION 8 — EXPOSURE CONTROLS, PERSONAL PROTECTION

Wear protective gloves, protective clothing, and eye protection. Wash hands thoroughly after handling.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Maroon powder. Fragrant cabbage odor.

pH indicator.

This material is red cabbage extract that has been freeze dried.

SECTION 10 — STABILITY AND REACTIVITY

Shelf life: Fair, it may grow mold, especially if it is stored in a humid environment.

SECTION 11 — TOXICOLOGICAL INFORMATION

Acute effects: N.A. ORL-RAT LD_{50} : N.A. Chronic effects: N.A. IHL-RAT LC_{50} : N.A. Target organs: N.A. SKN-RBT LD_{50} : N.A.

N.A. = Not available, not all health aspects of this substance have been fully investigated.

SECTION 12 — ECOLOGICAL INFORMATION

Data not yet available.

<u>SECTION 13 — DISPOSAL CONSIDERATIONS</u>

Please review all federal, state and local regulations that may apply before proceeding.

Flinn Suggested Disposal Method #26a is one option.

SECTION 14 — TRANSPORT INFORMATION

Shipping name: Not regulated. Hazard class: N/A. UN number: N/A.

N/A = Not applicable

SECTION 15 — REGULATORY INFORMATION

Not listed.

SECTION 16 — OTHER INFORMATION

This Safety Data Sheet (SDS) is for guidance and is based upon information and tests believed to be reliable. Flinn Scientific, Inc. makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the science instructor to be in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of Flinn Scientific, Inc. and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).

Consult your copy of the Flinn Science Catalog/Reference Manual for additional information about laboratory chemicals.

Revision Date: January 16, 2014