

Safety Data Sheet

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 05.04.2017

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Indicator Solution

SECTION 1: Identification

Product identifier

Product name: Indicator Solution

Product code: DU409004

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer:

United States

AquaPhoenix Scientific

860 Gitts Run Road

Hanover

PA 17331

(717) 632-1291

Supplier:

United States

Dubois Chemicals Inc.

3630 East Kemper Rd

Cincinnati

OH 45241

(800) 438-2647

Emergency telephone number:

United States

Emergency Phone No. (800) 255-3924

SECTION 2: Hazard identification

GHS classification:

Eye irritation, category 2A

Skin irritation, category 2

Label elements

Hazard pictograms:



Signal word: Warning

Hazard statements:

H319 Causes serious eye irritation.

H315 Causes skin 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.

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

P362 Take off contaminated clothing and wash before reuse.

P302+P352 If on skin: Wash with soap and water.

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

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

| Identification | Name | Weight % |
|---------------------------|----------------------------|----------|
| CAS number: 7732-18-5 | Water | >47 |
| CAS number: 1310-73-2 | Sodium hydroxide | 2 |
| CAS number: 64-19-7 | Acetic Acid | 16 |
| CAS number: 6131-90-4 | Sodium Acetate, Trihydrate | 34 |
| CAS number: 34487-61-1 | Phenol Red Na Salt | <1 |

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

After skin contact:

Wash affected area with soap and water

Seek medical attention if symptoms develop or persist

After eye contact:

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 ingestion:

Do not induce vomiting

Get medical advice/attention if you feel unwell

Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

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Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

Special precautions:

Heating causes a rise in pressure, risk of bursting and combustion

Shut off sources of ignition

Carbon monoxide and carbon dioxide may form upon combustion

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders)

Dispose of contents / container in accordance with local regulations

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

Use only with adequate ventilation.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

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Store away from foodstuffs.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

| Country (Legal Basis) | Substance | Identifier | Permissible concentration |
|-----------------------|------------------|------------|------------------------------------|
| ACGIH | Acetic Acid | 64-19-7 | ACGIH TLV TWA 10 ppm |
| | Acetic Acid | 64-19-7 | ACGIH TLV STEL 15 ppm |
| | Sodium hydroxide | 1310-73-2 | ACGIH TLV C 2.0 mg/m ³ |
| United States (OSHA) | Sodium hydroxide | 1310-73-2 | OSHA PEL TWA 2.0 mg/m ³ |
| | Acetic Acid | 64-19-7 | OSHA PEL TWA 10 ppm |
| | Acetic Acid | 64-19-7 | OSHA PEL TWA 25 mg/m ³ |
| NIOSH | Sodium hydroxide | 1310-73-2 | NIOSH REL C 2.0 mg/m ³ |
| | Sodium hydroxide | 1310-73-2 | NIOSH IDLH 10.0 mg/m ³ |
| | Acetic Acid | 64-19-7 | NIOSH REL TWA 10 ppm |
| | Acetic Acid | 64-19-7 | NIOSH REL TWA 25 mg/m ³ |
| | Acetic Acid | 64-19-7 | NIOSH REL ST 15 ppm |
| | Acetic Acid | 64-19-7 | NIOSH REL ST 37 mg/m ³ |

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

Perform routine housekeeping.

Wash contaminated clothing before reusing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

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| | |
|---|----------------------------------|
| Appearance (physical state, color): | Clear, red liquid |
| Odor: | Strong vinegar |
| Odor threshold: | Not determined or not available. |
| pH-value: | 4 |
| Melting/Freezing point: | Approx. 0-16.6°C |
| Boiling point/range: | Approx. 100-118°C |
| Flash point: | Not determined or not available. |
| Evaporation rate: | Not determined or not available. |
| Flammability (solid, gaseous): | Not determined or not available. |
| Explosion limit upper: | Not determined or not available. |
| Explosion limit lower: | Not determined or not available. |
| Vapor pressure: | Not determined or not available. |
| Vapor density: | Not determined or not available. |
| Density: | Not determined or not available. |
| Relative density: | Approx. 1.1-1.2 |
| Solubilities: | Not determined or not available. |
| Partition coefficient (n-octanol/water): | Not determined or not available. |
| Auto/Self-ignition temperature: | Not determined or not available. |
| Decomposition temperature: | Not determined or not available. |
| Dynamic viscosity: | Not determined or not available. |
| Kinematic viscosity: | Not determined or not available. |
| Explosive properties | Not determined or not available. |
| Oxidizing properties | Not determined or not available. |

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

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Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

Substance data:

| Name | Result |
|--------------------|--|
| Acetic Acid | Causes severe skin burns and eye damage. |
| Phenol Red Na Salt | Causes skin irritation. |
| Sodium hydroxide | Causes severe skin burns and eye damage. |

Serious eye damage/irritation

Assessment: Causes serious eye irritation

Product data: No data available.

Substance data:

| Name | Result |
|--------------------|--------------------------------|
| Phenol Red Na Salt | Causes serious eye irritation. |

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data:

| Name | Result |
|--------------------|---|
| Phenol Red Na Salt | Specific Target Organ Toxicity, Single Exposure - May cause respiratory irritation. |

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

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Product data: No data available.

Substance data: No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

| | |
|--------------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |
| Environmental hazards | None |
| Special precautions for user | None |

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International Maritime Dangerous Goods (IMDG)

| | |
|-------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |
| Environmental hazards | None |
| Special precautions for user | None |

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

| | |
|-------------------------------|---------------|
| UN number | Not regulated |
| UN proper shipping name | Not regulated |
| UN transport hazard class(es) | None |
| Packing group | None |
| Environmental hazards | None |
| Special precautions for user | None |

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

| | |
|--------------------|------|
| Bulk Name | None |
| Ship type | None |
| Pollution category | None |

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

| | | |
|------------|----------------------------|------------|
| 64-19-7 | Acetic Acid | Listed |
| 6131-90-4 | Sodium Acetate, Trihydrate | Not Listed |
| 34487-61-1 | Phenol Red Na Salt | Listed |
| 1310-73-2 | Sodium hydroxide | Listed |
| 7732-18-5 | Water | Listed |

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

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. 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

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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.

NFPA: 2-0-0

HMIS: 2-0-0

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End of Safety Data Sheet