SAFETY DATA SHEET

Revision date 31-August-2023

| 1. Identification | | |
|--|---|--|
| Product identifier | | |
| Product Name | PHENOLPHTHALEIN INDICATOR, 2 PERCENT SOLUTION IN 95 PERCENT ETHANOL | |
| Other means of identification | | |
| Product Code(s) | P-600 | |
| UN/ID no | UN1170 | |
| Synonyms | None | |
| Recommended use of the chemical and restrictions on use | | |
| Recommended use | No information available | |
| Restrictions on use | No information available | |
| Details of the supplier of the safety data sheet | | |
| Supplier Address Spectrum Chemical Mfg. Corp. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000 Emergency telephone number | | |

Emergency Telephone

Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| Serious eye damage/eye irritation | Category 2A |
|--|-------------|
| Germ cell mutagenicity | Category 2 |
| Carcinogenicity | Category 2 |
| Reproductive toxicity | Category 1A |
| Specific target organ toxicity (single exposure) | Category 3 |
| Specific target organ toxicity (repeated exposure) | Category 1 |
| Flammable liquids | Category 2 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Danger

Hazard statements



Revision Number 2

Causes serious eye irritation Suspected of causing genetic defects Suspected of causing cancer May damage fertility or the unborn child May cause respiratory irritation. May cause drowsiness or dizziness Causes damage to organs through prolonged or repeated exposure Highly flammable liquid and vapor



Appearance Clear

Physical state Liquid

Odor Mild or Pleasant

Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not breathe dust/fume/gas/mist/vapors/spray Do not eat, drink or smoke when using this product Use only outdoors or in a well-ventilated area Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof electrical/ ventilating / lighting/ .? / equipment Use only non-sparking tools Take precautionary measures against static discharge Keep cool

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention Specific treatment (see .? on this label) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention If skin irritation occurs: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

| Chemical name | CAS No | Weight-% |
|-------------------------|-----------|----------|
| Ethyl Alcohol 200 proof | 64-17-5 | 93.1 |
| Water | 7732-18-5 | 4.9 |
| Phenolphthalein, powder | 77-09-8 | 2 |

Description of first aid measures

| General advice | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. | |
|--|--|--|
| Inhalation | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. Get medical attention immediately if symptoms occur. | |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists. | |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists. | |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. | |
| Self-protection of the first aider | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. | |
| Most important symptoms and effects, both acute and delayed | | |
| Symptoms | May cause redness and tearing of the eyes. Burning sensation. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. | |
| Indication of any immediate medical attention and special treatment needed | | |

Note to physicians Treat symptomatically.

5. Fire-fighting measures

| Suitable Extinguishing Media Large Fire | Dry chemical. Carbon dioxide (CO2). water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. | |
|--|---|--|
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. | |
| Specific hazards arising from the chemical | risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. | |
| Hazardous combustion products | Carbon dioxide (CO2). | |
| Explosion data Sensitivity to mechanical impact none. | | |
| Sensitivity to static discharge | yes. | |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. | |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. | | |
|--|--|--|--|
| Other information | Ventilate the area. Refer to protective measures listed in Sections 7 and 8. | | |
| Methods and material for containment and cleaning up | | | |
| Methods for containment | Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. | | |
| Methods for cleaning up | Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. | | |

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Take off contaminated clothing and wash before reuse. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage ConditionsKeep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat,
sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static
electricity). Keep in properly labeled containers. Do not store near combustible materials.
Keep in an area equipped with sprinklers. Store in accordance with the particular national
regulations. Store in accordance with local regulations. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-------------------------|-------------------|----------------|------------|
| Ethyl Alcohol 200 proof | No data available | 1000 ppm TWA | - |
| 64-17-5 | | 1900 mg/m³ TWA | |

Appropriate engineering controls

| Engineering controls | Showers Eyewash stations Ventilation systems. |
|------------------------------------|--|
| Individual protection measures, su | ch as personal protective equipment |
| Eye/face protection | Tight sealing safety goggles. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| information on basic physical and o | | |
|--|--|--------------------------------|
| Physical state | Liquid | |
| Appearance | Clear | |
| Color | Colorless to Slightly Yellow | |
| Odor | Mild or Pleasant | |
| Odor threshold | No information available | |
| Bronorty | Values | Domorko - Mothod |
| Property | <u>Values</u> no data available | Remarks • Method None known |
| pH Malting point (freezing point | -114.1117.3 °C / -173.4 - | None known |
| Melting point / freezing point | -114.1117.3 C / -173.4 - -179.1 °F | NOTE KTOWT |
| Boiling point / boiling range | | None known |
| Flash point | 17 °C / 62.6 °F | CC (closed cup) |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| Vapor pressure | 5.7-5.9 (for Ethyl alcohol) | None known |
| Vapor density | 1.59 (for Ethyl alcohol) | None known |
| Relative density | 0.8 (for 95% ethanol) | None known |
| Water solubility | No data available | None known |
| Solubility(ies) | Very soluble in Ethanol | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | 363 - 426 °C / 685.4 - 798.8 °F | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |
| | | |
| Other information | No information available | |
| Explosive properties Oxidizing properties | No information available | |
| | | |
| | | |
| Softening point | No information available | |
| Softening point Molecular weight | No information available No information available | |
| Softening point | No information available | |

Bulk density

No information available

| 10. Stability and reactivity | | |
|--|--|--|
| Reactivity | No information available. | |
| Chemical stability | Stable under normal conditions. | |
| Possibility of hazardous reactions | None under normal processing. | |
| Conditions to avoid | Heat, flames and sparks. | |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. | |
| Hazardous decomposition products None known based on information supplied. | | |

11. Toxicological information

Information on likely routes of exposure

| Product Information | | |
|--|--|--|
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. May cause drowsiness or dizziness. | |
| Eye contact | Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation. | |
| Skin contact | Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components). | |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. | |
| Symptoms related to the physical, chemical and toxicological characteristics | | |
| Symptoms | Redness. May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. | |
| Acute toxicity_ | | |

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------------------|--------------------|-------------|---------------------|
| Ethyl Alcohol 200 proof 64-17-5 | = 7060 mg/kg (Rat) | - | 124.7 mg/L (Rat)4 h |
| Water 7732-18-5 | 90 mL/kg (Rat) | - | - |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritationClassification based on data available for ingredients. Irritating to skin.Serious eye damage/eye irritationClassification based on data available for ingredients. Causes serious eye irritation.Respiratory or skin sensitizationNo information available.

Germ cell mutagenicity

Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects.

Carcinogenicity

Contains a known or suspected carcinogen. Classification based on data available for ingredients. Suspected of causing cancer.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| The table below indicates whether bash agency has noted any ingreatent as a sarolinegen. | | | | |
|--|-------|--------------------------|-----|------|
| Chemical name | ACGIH | IARC | NTP | OSHA |
| Ethyl Alcohol 200 proof | - | Group 1 - Monograph | - | - |
| 64-17-5 | | 100E [2012] in alcoholic | | |
| | | beverages | | |
| | | Monograph 96 [2010] in | | |
| | | alcoholic beverages | | |
| Phenolphthalein, powder | - | Group 2B - Possibly | - | - |
| 77-09-8 | | carcinogenic to humans - | | |
| | | Monograph 76 [2000] | | |

Legend

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

| Reproductive toxicity | Contains a known or suspected reproductive toxin. Classification based on data available for ingredients. May damage fertility or the unborn child. |
|--------------------------|---|
| STOT - single exposure | May cause drowsiness or dizziness. |
| STOT - repeated exposure | Causes damage to organs through prolonged or repeated exposure. |

 Target organ effects
 liver, respiratory system, Eyes, Skin, central nervous system, blood, Reproductive System.

- Aspiration hazard No information available.
- Other adverse effects No information available.
- Interactive effects No information available.

12. Ecological information

Ecotoxicity

Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------------------------|----------------------|---|-------------------------------|--|
| Ethyl Alcohol 200 proof 64-17-5 | - | LC50: 12.0 - 16.0mL/L (96h, Oncorhynchus mykiss) LC50: 13400 - 15100mg/L (96h, Pimephales promelas) LC50: >100mg/L (96h, Pimephales promelas) | - | LC50: 9268 - 14221mg/L (48h, Daphnia magna) EC50: =10800mg/L (24h, Daphnia magna) EC50: =2mg/L (48h, Daphnia magna) |

Persistence and degradability

No information available.

Inherently biodegradable.

Bioaccumulation

Component Information

| Chemical name | Partition coefficient | |
|-------------------------|-----------------------|--|
| Ethyl Alcohol 200 proof | -0.32 | |
| 64-17-5 | | |

Other adverse effects

No information available.

13. Disposal considerations

Waste treatment methods

| Waste from residues/unused products | Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. |
|--|--|
| Contaminated packaging | Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers. |

14. Transport information

| DOT UN/ID no Proper shipping name Hazard class Special Provisions Special Provisions Marine Pollutant Description Emergency Response Guide Number | UN1170 Ethanol 3 II 24, IB2, T4, TP1 Severe Marine Pollutant UN1170, Ethanol, 3, II 127 |
|--|--|
| <u>TDG</u> UN/ID no. Proper shipping name Hazard class Packing Group Special Provisions Description | UN1170 Ethanol 3 II 150 UN1170, Ethanol, 3, II |
| MEX UN-No Proper Shipping Name Hazard class Special Provisions Packing Group Description | UN1170 Ethanol 3 144 II UN1170, Ethanol, 3, II |
| ICAO (air) UN/ID no. Hazard class Packing Group Special Provisions | UN1170 3 II A58, A180, A3 |
| IATA UN number Hazard Class Packing group Emergency Response Guide Number Special Provisions | UN1170 3 II 3L A180, A3, A58 |
| IMDG UN number Hazard Class Packing group EmS-No Special Provisions Marine Pollutant | UN1170 3 II F-E, S-D 144 NP1 |
| <u>RID</u> UN number Proper shipping name Hazard Class | UN1170 ETHANOL 3 |

| Clas Spec | king group sification code cial Provisions cription els | II F1 144, 601 UN1170, 3 | ETHANOL, 3, II |
|--------------|---|--------------------------------------|-----------------------|
| • | number ber shipping name | UN1170 Ethanol | |
| Haza | ard Class | 3 | |
| | king group sification code | ll F1 | |
| | nel restriction code | (D/E) | |
| | cial Provisions | 144, 601 | |
| Dese Labe | cription | UN1170, 3 | Ethanol, 3, II, (D/E) |
| Labe | 713 | 5 | |
| ADN | | | |
| • | DNo | UN1170 | |
| | er shipping name ard Class | Ethanol 3 | |
| | king Group | 3 | |
| | sification code | F1 | |
| Spee | cial Provisions | 144, 601 | |
| | cription | , | Ethanol, 3, II |
| | ard label(s) | 3 | |
| | ted quantity (LQ) ilation | 1 L VE01 | |
| | pment Requirements | PP, EX, A | N |
| - 1 - | | .,,, | |

15. Regulatory information

International Inventories

TSCA

Complies

| DSL/NDSL | Complies |
|---------------|--|
| EINECS/ELINCS | Complies |
| ENCS | This product complies with ENCS: |
| IECSC | This product complies with China: |
| KECL | Complies |
| PICCS | Complies |
| AICS | All the constituents of this material are listed on the Australian Inventory of Chemical |
| | Substances (AICS). |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

| Chemical name | SARA 313 - Threshold Values % | |
|-----------------------------------|-------------------------------|--|
| Phenolphthalein, powder - 77-09-8 | 0.1 | |

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

| Chemical name | California Proposition 65 | |
|-----------------------------------|---------------------------|--|
| Ethyl Alcohol 200 proof - 64-17-5 | developmental toxicity | |
| | carcinogen | |
| Phenolphthalein, powder - 77-09-8 | carcinogen | |

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------------|------------|---------------|--------------|
| Ethyl Alcohol 200 proof 64-17-5 | 0844 | Present | Present |
| Phenolphthalein, powder 77-09-8 | SN 4110 | - | - |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA Health hazards 2 Flammability 3 Instability 0 Physical and chemical properties -HMIS Health hazards 2* Flammability 3 Physical hazards 0 Personal protection X Chronic Hazard Star Legend * = Chronic Health Hazard Key or legend to abbreviations and acronyms used in the safety data sheet Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION STEL (Short Term Exposure Limit) TWA TWA (time-weighted average) STEL Ceiling Maximum limit value

Key literature references and sources for data used to compile the SDS Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

| Revision date | 31-August-2023 |
|-------------------|---------------------------|
| Revision Note | No information available. |
| <u>Disclaimer</u> | |

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet