KM00686 PHENOLPHTHALEIN SOLUTION 100ML + 500ML SDS No.: PP0154 9344 SAFETY DATA SHEET

Chemical Product and Company Information

Km00686 Km00687

FLAMMABLE STORAGE CODE RED

Page Et of E2

CHEMTREC 24 Hour Emergency Phone Number (800) 424-9300 For laboratory use only. Not for drug, food or household use:

Nasco	901 Janesville Ave. P.O. Box 901 Fort Atkinson, WI 53538-0901

Section 1

Product PHENOLPHTHALEIN SOLUTION	
Synonyms 1% Phenolphthalein in 95% Ethanol / Phenolphthalein Indicat	lor
Section 2 Hazards Identification	
Signal word: DANGER Pictograms: GHS02 / GHS07 / GHS08 / GHS06 Target organs: Eyes, Central nervous system, Liver, Kidneys. Image: Signal word: Danage of the system of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Danage of the system, Liver, Kidneys. Image: Signal word: Sign	 Precautionary statement: P201: Obtain special instructions before use. P202: Do not handle until all safety precautions have been read and understood. P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking. P240: Ground/bond container and receiving equipment. P241: Use explosion-proof electrical/ventilating/lighting equipment. P242: Use only non-sparking tools. P243: Take precautionary measures against static discharge. P260: Do not breathe mist/vapours/spray. P264: Wash hands thoroughly after handling. P271: Use only outdoors or in a well-ventilated area. P260: Wear protective gloves/protective clothing/eye protection/face protection. P305+P361+P335: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. P312: Call a POISON CENTER or doctor if you feel unwell. P332+P313: If skin imitation occurs: Get medical attention. P362+P364: Take off contaminated clothing and wash it before reuse. P403+P233: Store in a well-ventilated place. Keep container tightly closed. P403-P233: Store in a well-ventilated place. Keep container tightly closed. P403: Store locked up. P501: Dispose of contents/container to a licensed chemical disposal agency in accordance with local/regional/national regulations.

Ca Prop 65: This product contains a chemical known to the State of California to cause reproductive toxicity (Methanol, developmental).

Chemical Name	CAS #	%	EINECS	
Ethvi alcohol	64-17-5	80.75 - 81.51%	200-578-6	
sopropyl alcohol	67-63-0	8.55%	200-661-7	
Vater	7732-18-5	5.00%	231-791-2	
Aethanol	67-56-1	3.80 - 4.08%	200-659-6	
Phenolohthalein	77-09-8	1.00%	201-004-7	
Methyl isobutyl ketone	108-10-1	0.85 - 0.95%	203-550-1	

Section 4 First Aid Measures

INGESTION: MAY BE HARMFUL IF SWALLOWED. Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: MAY BE HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT IRRITATION. Remove to fresh air. If not breathing, give artificial respiration, if breathing is difficult, give oxygen. Get medical attention.

EYE CONTACT: CAUSES EYE IRRITATION. Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention.

SKIN ABSORPTION: MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CAUSES SKIN IRRITATION. Remove contaminated clothing. Flush thoroughly with mild scap and water. If irritation occurs, get medical attention.

Section 5 Fire Fighting Measures

Suitable Extinguishing Media: Carbon dioxide, dry chemical, dry sand, alcohol foam.

Protective Actions for Fire-fighters: In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective gear. Use water spray to keep fire-exposed containers cool.

Specific Hazards: During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Vapors formed from this product are heavier than air and may travel along the ground to a distant source of ignition and flash back instantly. Flame may not be visible in daylight.

Section 6 Accidental Release Measures

Personal Precautions: Evacuate personnel to safe area. Use proper personal protective equipment as indicated in Section 8. Provide adequate ventilation.

Environmental Precautions: Avoid runoff into storm sewers and ditches which lead to waterways.

Containment and Cleanup: Remove all sources of ignition. Absorb with inert dry material, sweep or vacuum up and place in a suitable container for proper disposal. Wash spill area with soap and water.

(2012 EMERGENCY RESPONSE GUIDEBOOK, (PHH60-ERG2012), GUIDE # 127)

KM00686 PHENOLPHTHALEIN SOLUTION 100ML

Handling & Storage Section 7

Precautions for Safe Handling: Read label on container before using. Do not wear contact lenses when working with chemicals. Keep out of reach of children. Avoid contact with eyes, skin and clothing. Do not inhale vapors, spray or mist. Use with adequate ventilation. Avoid ingestion. Wash thoroughly after handling. Remove and wash dothing before reuse.

Conditions for Safe Storage: Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from ignition sources.

Section 2	Exposure Controls / Personal P	rotection		
JECOON C	Chemical Name	ACGIH (TLV)	OSHA (PEL)	NIOSH (REL)
Exposure Limits:		STEL: 1000 ppm / 1880 mg/m ³ (A3)	TWA: 1000 ppm / 1900 mg/m ³	TWA: 1000 ppm / 1900 mg/m ^o

Engineering controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles, or faceshield, lab coat or apron, appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory protection: None should be needed in normal laboratory handling at room temperatures. If misty conditions prevail, work in fume hood or wear a NIOSH/MSHAapproved respirator.

Appearance: Clear, colorless liquid. Odor: Mild charactenistic odor. Odor threshold: Data not available. pH: Data not available. Melting / Freezing point: -114°C (-173°F)° Boiling point: 74-80°C (165.2-176°F)° Flash point: 5°C (41°F)°	Evaporation rate (Butyl acatate = 1): Ca 2" Flammability (solid/gas): Data not available. Explosion limits: Lower / Upper: 4.0%(V) / 20.0%(V)* Vapor pressure (mm Hg): Ca 50 @ 20°C* Vapor density (Air = 1): Ca 1.5" Relative density (Specific gravity): 0.7919-0.7955°C @ 60/60°F* Solubility(ies): Soluble in water.	Partition coefficient: (n-octanol / water): Low Pow:32* Auto-ignition temperature: 400°C (752°F)* Decomposition temperature: Data not available. Viscosity: Data not available. Molecular formula: Mixture Molecular weight: Mixture *1200 Proof Ethanol
Section 10 Stability & Reactivity		
Incompatible materials: Strong oxidizers, inorg Hazardous decomposition products: Oxides (of carbon.	
Section 11 Toxicological Informat		
Acute toxicity: Oral-rat LD50: 7060 mg/kg ; Inf	valation-rat LC50: 124.7 mg//4hours (Ethanol)	
Skin corrosion/irritation: Skin-rabbit - Slight in Serious eye damage/irritation: Eyes-rabbit - S	man. Severe initant	
Respiratory or skin sensitization: Data not an	/aiable	
Germ cell mutagenicity: Data not available	1 MAY 1 MI W 1 M	
Carcinogenity: Data not available		
NTP- (R) Reasonably anticipated to be a human	carcinogen. [Phenolphthalein]	
IARC classified: Group 2B: Possibly carcinogen	ic to humans. [Phenoiphthalein]	

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinog

Reproductive toxicity: Data not available

STOT-single exposure: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

STOT-repeated exposure: Data not available

Aspiration hazard: Data not available

Potential health effects:

Inhalation: Inhalation may cause dizziness, drowsiness, nausea, vomiting, inability to concentrate and imitation of the throat.

Ingestion: Ingestion causes dizziness, drowsiness, decreased reaction, euphona, nausea, vomiting, staggering gait and coma.

Skin: Contact with skin causes irritation defatting on prolonged contact.

Eyes: Contact with eyes may cause blindness.

Signs and symptoms of exposure: See Potential health effects above. Risk of cancer depends on level and duration of exposure.

Additional information: RTECS #: KQ6300000 [Ethanol]

Ecological Information Section 12

Toxicity to fish: Oncorhynchus mykiss (fish, fresh water), LC50 = 11,200 mg//24 hours [Ethanol] Toxicity to daphnia and other aquatic invertebrates: Daphnia magna (Crustacia), EC50 = 10,800 mg/l/24 hours [Ethanol, 99.8% pure] Toxicity to algae: Chiorella pyrenoidosa (Algae), EC50 = 9,310 mg//growth rate [Ethanol, absolute]

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

PBT and vPvB assessment: No data available

Mobility in soil: No data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Disposal Considerations Section 13

These disposal guidelines are intended for the disposal of catalog-size quantities only. Federal regulations may apply to empty container. State and/or local regulations may be different. Dispose of in accordance with all local, state and federal regulations or contract with a licensed chemical disposal agency. Transport Information Contine 44

UN/NA number: UN117 Hazard class: 3 Exceptions: Limited qua	Shipping name Packing group antity equal to or less than): II	Reporta	ble Quantity: 5.0 ide # 127)00 lbs (2270	kg) Mari	ne pollutant: No
Section 15 Regul A chemical is considered to be lis	intervintermation	overnas form t	on the Inventory list.				Annual Contractor Contractor Contractor Contractor Contractor
Component		TSCA	CERLCA (RQ)	RCRA code	DSL	NDSL	WHMIS Classification
Ethanol		Listed	Not listed 5,000 lbs.	D001 U154 Not listed	Listed Listed Listed	Not listed Not listed Not listed	B2; D2B B2; D1B; D2A; D2B B2; D2B

The information contained herein is furnished without warrantly of any kind. Employers should use this information only as a supplement to other information gathered by them and must make indepen-The information contained nerein is armismed wereau warrainy or any kino. Employers and a care manneau rule as a suppression to use information genered by mem and must make indepen-dent determinations of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees. NTP: National Toxicology Program, IARC: International Agency for Research on Cancer, OSHA: Occupational Safety and Health Administration, STOT: Specific Target Organ Toxicity, SE: Single Exposure, RE: Repeated Exposure, ERG: Emergency Response Guidebook.

Supercedes: November 26, 2013