SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier
Product Name Phenolphthalein Solution

Other means of identification
Product Code(s) 189753

Safety data sheet number M00649

Synonyms

Recommended use of the chemical and restrictions on use
Recommended Use Indicator for pH.
Uses advised against None.
Restrictions on use None.

Details of the supplier of the safety data sheet

Manufacturer Address
Hach Company
P.O.Box 389 Loveland, CO 80539 USA
(970) 669-3050

Emergency telephone number
(303) 623-5716 - 24 Hour Service (515)232-2533 - 8am - 4pm CST

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not Hazardous Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

Hazard statements
EUH210 - Safety data sheet available on request

The product contains no substances which at their given concentration, are considered to be hazardous to health

Precautionary statements

Other Information
Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable

Mixture

Synonyms .

Percent ranges are used where confidential product information is applicable.

Chemical Name	CAS No	Percent Range	HMRIC #
1,2-Propanediol	57-55-6	>99%	-
Acetone	67-64-1	0.1 - 1%	-
Phenolphthalein	77-09-8	<0.1%	-

4. FIRST AID MEASURES

Description of first aid measures

General advice IF IN EYES: Flush eyes for at least 15 minutes. May cause skin irritation.

Eye contact 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.

Skin contact For minor skin contact, avoid spreading material on unaffected skin. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Remove and isolate contaminated clothing and shoes. Call a POISON CENTER or doctor if you feel unwell. If skin irritation persists, call a physician.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.

Self-protection of the first aider Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11: TOXICOLOGICAL INFORMATION.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Carbon dioxide. Alcohol foam. Dry chemical. Water.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Flammable properties
Can burn in fire, releasing toxic vapors.

Specific hazards arising from the chemical
May react violently with. Oxidizers.

Hazardous combustion products Carbon monoxide, Carbon dioxide.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

U.S. Notice Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

EC Notice Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

WHMIS Notice Only persons properly qualified to respond to an emergency involving hazardous substances should respond to a spill involving chemicals. See Section 13, Special Instructions for disposal assistance.

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

Emergency Response Guide Number Not applicable

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Flammability class Class IIIB

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetone 0.1 - 1%	STEL: 500 ppm TWA: 250 ppm	TWA: 1000 ppm TWA: 2400 mg/m³ (vacated) TWA: 750 ppm (vacated) TWA: 1800 mg/m³ (vacated) STEL: 2400 mg/m³ (vacated) STEL: 1000 ppm	IDLH: 2500 ppm TWA: 250 ppm TWA: 590 mg/m³

Chemical Name	Alberta OEL	British Columbia OEL	Manitoba OEL	New Brunswick OEL	New Foundland & Labrador OEL
Acetone 0.1 - 1%	TWA: 500 ppm TWA: 1200 mg/m³ STEL: 750 ppm STEL: 1800 mg/m³	TWA: 250 ppm STEL: 500 ppm	TWA: 250 ppm STEL: 500 ppm	TWA: 500 ppm TWA: 1188 mg/m³ STEL: 750 ppm STEL: 1782 mg/m³	TWA: 250 ppm STEL: 500 ppm

Chemical Name	Northwest Territories OEL	Nova Scotia OEL	Nunavut OEL	Ontario TWA	Prince Edward Island OEL
1,2-Propanediol >99%	NDF	NDF	NDF	TWA: 10 mg/m³ TWA: 50 ppm TWA: 155 mg/m³	NDF
Acetone 0.1 - 1%	TWA: 500 ppm STEL: 750 ppm	STEL: 500 ppm TWA: 250 ppm	TWA: 500 ppm STEL: 750 ppm	TWA: 500 ppm STEL: 750 ppm	STEL: 500 ppm TWA: 250 ppm

Chemical Name	Quebec OEL	Saskatchewan OEL	Yukon OEL
Acetone 0.1 - 1%	TWA: 500 ppm TWA: 1190 mg/m³ STEL: 1000 ppm STEL: 2380 mg/m³	TWA: 500 ppm STEL: 750 ppm	STEL: 1250 ppm STEL: 3000 mg/m³ TWA: 1000 ppm TWA: 2400 mg/m³

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Legend See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear tight sealing safety goggles and/or face protection shield. Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin and body protection Wear protective gloves and protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wear suitable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended. Handle in accordance with good industrial hygiene and safety practice. Avoid prolonged or repeated contact with skin. Take off all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs.

Environmental exposure controls
Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid		
Gas Under Pressure	Not classified according to GHS criteria		
Appearance	aqueous solution	**Color**	colorless
Odor	Mild hydrocarbon	**Odor threshold**	No data available

Property	Values	Remarks • Method
Molecular weight	No data available	
pH	6.1	
Melting point/freezing point	No data available	
Boiling point / boiling range	188 °C / 370 °F	
Evaporation rate	0.01 (water = 1)	
Vapor pressure	1.35 mm Hg / 0.18 kPa at 20 °C / 68 °F	Estimation based on theoretical calculation
Vapor density (air = 1)	2 (air = 1)	
Specific gravity (water = 1 / air = 1)	1.032	
Partition Coefficient (n-octanol/water)	Not applicable	
Soil Organic Carbon-Water Partition Coefficient	Not applicable	
Autoignition temperature	371 °C / 700 °F	
Decomposition temperature	No data available	
Dynamic viscosity	No data available	
Kinematic viscosity	No data available	

Solubility(ies)

Water solubility

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

Chemical Name	Solubility classification	Solubility	Solubility Temperature
Acid	Soluble	> 1000 mg/L	25 °C / 77 °F

Other Information

Metal Corrosivity Not classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate No data available

Aluminum Corrosion Rate No data available

Bulk density Not applicable

Explosive properties Not classified according to GHS criteria.

Explosion data Can burn in fire, releasing toxic vapors.

Upper explosion limit 12.6%

Lower explosion limit 2.6%

Flammable properties Can burn in fire, releasing toxic vapors.

Flammability Limit in Air

Upper flammability limit: No data available

Lower flammability limit: No data available

Flash point > 100 °C / 212 °F

Method OC (open cup)

Oxidizing properties Not classified according to GHS criteria.

Reactivity propeties Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

10. STABILITY AND REACTIVITY

Reactivity propeties
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria

Chemical stability
Stable under recommended storage conditions.

Special dangers of the product
None reported

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to avoid
Extremes of temperature and direct sunlight. Incompatible materials.

Incompatible materials
Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products
Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.

Explosive properties
Not classified according to GHS criteria. Can burn in fire, releasing toxic vapors.

Upper explosion limit 12.6%

Lower explosion limit 2.6%

Autoignition temperature
371 °C / 700 °F

Sensitivity to Static Discharge
None reported

Sensitivity to Mechanical Impact
None reported

11. TOXICOLOGICAL INFORMATION

NIOSH (RTECS) Number None reported

Information on Likely Routes of Exposure

Product Information	Causes mild skin irritation.
Inhalation	No known effect based on information supplied.
Eye contact	No known effect based on information supplied.
Skin contact	Causes mild skin irritation.
Ingestion	No known effect based on information supplied.
Aggravated Medical Conditions	Skin disorders.
Toxicologically synergistic products	None known.
Toxicokinetics, metabolism and distribution	See ingredients information below.

Chemical Name	Toxicokinetics, metabolism and distribution
1,2-Propanediol (>99%) CAS#: 57-55-6	Based on human data (oral child), large doses over prolonged period of time cause behavioral changes.
Acetone (0.1 - 1%) CAS#: 67-64-1	Ingestion causes gastroenteric irritation. The blood glucose leves are affected and ketosis may be fatal.
Phenolphthalein (<0.1%) CAS#: 77-09-8	Absorbed and eliminated by kidney. Excreted in bile, urine and milk..

Product Acute Toxicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Acute Toxicity Data

Oral Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	Rat LD_{50}	20000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Acetone (0.1 - 1%) CAS#: 67-64-1	Rat LD_{50}	5800 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)
Phenolphthalein (<0.1%) CAS#: 77-09-8	Rat LD_{50}	> 1000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

Dermal Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	Rabbit LD_{50}	20800 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Acetone (0.1 - 1%) CAS#: 67-64-1	Rabbit LD_{50}	20000 mg/kg	None reported	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Dust/Mist) Exposure Route

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Acetone (0.1 - 1%) CAS#: 67-64-1	Rat LC_{50}	25.05 mg/L	4 hours	None reported	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Product Skin Corrosion/Irritation Data
No data available.

Ingredient Skin Corrosion/Irritation Data

Chemical Name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	Standard Draize Test	Human	500 mg	7 days	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Acetone (0.1 - 1%)	Open Irritation Test	Rabbit	395 mg	None reported	Mild skin irritant	RTECS (Registry of Toxic Effects of

CAS#: 67-64-1						Chemical Substances)
Chemical Name	**Test method**	**Species**	**Reported dose**	**Exposure time**	**Results**	**Key literature references and sources for data**
1,2-Propanediol (>99%) CAS#: 57-55-6	Standard Draize Test	Human	104 mg	72 hours	Skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Acetone (0.1 - 1%) CAS#: 67-64-1	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

Product Serious Eye Damage/Eye Irritation Data
No data available.

Ingredient Eye Damage/Eye Irritation Data

Chemical Name	**Test method**	**Species**	**Reported dose**	**Exposure time**	**Results**	**Key literature references and sources for data**
1,2-Propanediol (>99%) CAS#: 57-55-6	Standard Draize Test	Rabbit	500 mg	24 hours	Mild eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Acetone (0.1 - 1%) CAS#: 67-64-1	Standard Draize Test	Rabbit	20 mg	None reported	Corrosive to eyes	RTECS (Registry of Toxic Effects of Chemical Substances)
Chemical Name	**Test method**	**Species**	**Reported dose**	**Exposure time**	**Results**	**Key literature references and sources for data**
Acetone (0.1 - 1%) CAS#: 67-64-1	Standard Draize Test	Human	186300 ppm	None reported	Mild eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)

Sensitization Information

Product Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

Ingredient Sensitization Data

Skin Sensitization Exposure Route No data available.

Respiratory Sensitization Exposure Route No data available.

Chronic Toxicity Information

Product Repeat Dose Toxicity Data

Oral Exposure Route No data available.

Dermal Exposure Route No data available.

Inhalation (Dust/Mist) Exposure Route No data available.

Inhalation (Vapor) Exposure Route No data available.

Inhalation (Gas) Exposure Route No data available.

Ingredient Repeat Dose Toxicity Data

Oral Exposure Route If available, see data below

Dermal Exposure Route If available, see data below

Inhalation (Dust/Mist) Exposure Route If available, see data below

Inhalation (Vapor) Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	Rat TC_{Lo}	2.180 mg/L	90 days	**Behavioral** Food intake **Biochemical** Enzyme inhibition, induction, or change in blood or tissue levels (dehydrogenases) **Endocrine** Changes in spleen weight	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Gas) Exposure Route No data available

Chemical Name	CAS No	ACGIH	IARC	NTP	OSHA
1,2-Propanediol	57-55-6	-	-	-	-
Acetone	67-64-1	-	-	-	-
Phenolphthalein	77-09-8	-	Group 2B	Reasonably Anticipated	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Group 2B - Possibly Carcinogenic to Humans
NTP (National Toxicology Program)	Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	X - Present

Product Carcinogenicity Data No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Carcinogenicity Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Product Germ Cell Mutagenicity*invitro*Data
No data available.

Ingredient Germ Cell Mutagenicity*invitro*Data If available, see data below

Chemical Name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	Cytogenetic analysis	Hamster fibroblast	32000 mg/L	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)
Acetone (0.1 - 1%) CAS#: 67-64-1	Cytogenetic analysis	Hamster fibroblast	40000 mg/kg	None reported	Positive test result for mutagenicity	RTECS (Registry of Toxic Effects of Chemical Substances)

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Germ Cell Mutagenicity*invivo*Data

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Oral Exposure Route No data available

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route No data available

Inhalation (Vapor) Exposure Route No data available

Inhalation (Gas) Exposure Route No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Acetone (0.1 - 1%) CAS#: 67-64-1	Rat TD_{Lo}	273000 mg/kg	13 weeks	**Paternal Effects** Spermatogenesis (including genetic material, sperm morphology, motility, and count)	RTECS (Registry of Toxic Effects of Chemical Substances)

Dermal Exposure Route No data available

Inhalation (Dust/Mist) Exposure Route If available, see data below

Chemical Name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Acetone (0.1 - 1%) CAS#: 67-64-1	Domestic mammal - Not specified TC_{Lo}	0.0315 mg/L	13 days	**Effects on Fertility**Post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants)	RTECS (Registry of Toxic Effects of Chemical Substances)

Inhalation (Vapor) Exposure Route If available, see data below

Inhalation (Gas) Exposure Route No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on the classification principles, not classified as hazardous to the environment.

Product Ecological Data

Aquatic toxicity

Fish No data available

Crustacea No data available

Algae No data available

Terrestrial toxicity

Soil No data available

Vertebrates No data available

Invertebrates No data available

Ingredient Ecological Data

Aquatic toxicity

Fish

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	96 hours	*Pimephales promelas*	LC_{50}	51400 mg/L	IUCLID (The International Uniform Chemical Information Database)
Acetone (0.1 - 1%) CAS#: 67-64-1	96 hours	*Pimephales promelas*	LC_{50}	6210 mg/L	PEEN (Pan European Ecological Network)
Chemical Name	**Exposure time**	**Species**	**Endpoint type**	**Reported dose**	**Key literature references and sources for data**
Phenolphthalein (<0.1%) CAS#: 77-09-8	96 hours	None reported	LC_{50}	31.18 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

Crustacea

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,2-Propanediol (>99%)	48 Hours	*Daphnia magna*	LC_{50}	34400 mg/L	IUCLID (The International Uniform Chemical Information

CAS#: 57-55-6					Database)
Acetone (0.1 - 1%) CAS#: 67-64-1	48 Hours	*Daphnia magna*	EC_{50}	10294 mg/L	PEEN (Pan European Ecological Network)
Chemical Name	**Exposure time**	**Species**	**Endpoint type**	**Reported dose**	**Key literature references and sources for data**
Phenolphthalein (<0.1%) CAS#: 77-09-8	48 hours	None reported	LC_{50}	20.54 mg/L	Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

Algae

Chemical Name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
1,2-Propanediol (>99%) CAS#: 57-55-6	96 hours	*Selenastrum capricornutum*	EC_{50}	19000 mg/L	IUCLID (The International Uniform Chemical Information Database)

Terrestrial toxicity

Soil No data available

Vertebrates No data available

Invertebrates No data available

Other Information

Persistence and degradability
None known.

Product Biodegradability Data
No data available.

Ingredient Biodegradability Data
No data available

Bioaccumulation
If available, see ingredient data below.

Product Bioaccumulation Data Test data reported below.

Ingredient Bioaccumulation Data No data available

Additional information

Product Information

Partition Coefficient (n-octanol/water) Not applicable

Ingredient Information

Chemical Name	Partition Coefficient (n-octanol/water)	Method
1,2-Propanediol (>99%) CAS#: 57-55-6	log K_{ow} = -0.92	No information available

Acetone (0.1 - 1%) CAS#: 67-64-1	log K_{ow} = 0.58	No information available

Mobility
Mobility in soil: High mobility. If available, see ingredient data below.

Product Information

Soil Organic Carbon-Water Partition Coefficient Not applicable

Ingredient Information

Chemical Name	Soil Organic Carbon-Water Partition Coefficient	Method
1,2-Propanediol (>99%) CAS#: 57-55-6	log K_{oc} = -0.41	No information available

Additional information

Water solubility

Product Information

Water solubility classification	Water solubility	Water Solubility Temperature
Soluble	> 1000 mg/L	25 °C / 77 °F

Ingredient Information

Chemical Name	Water solubility classification	Water solubility	Water solubility temperature °C	Water solubility temperature °F
1,2-Propanediol CAS#: 57-55-6	Completely soluble	100000 mg/L	20 °C	68 °F
Acetone CAS#: 67-64-1	Soluble	> 1000 mg/L	25 °C	77 °F
Phenolphthalein CAS#: 77-09-8	Insoluble	< 0.1 mg/L	25 °C	77 °F

Other adverse effects
Contains a substance with an endocrine-disrupting potential.

Chemical Name	EU - Endocrine Disrupters Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Endocrine disrupting potential
Phenolphthalein (<0.1%) CAS#: 77-09-8	Group III Chemical	-	-

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Contaminated packaging Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from

empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

US EPA Waste Number U002

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Acetone 67-64-1	-	Included in waste stream: F039	-	U002

Special instructions for disposal If permitted by regulation. Dilute to 3 to 5 times the volume with cold water. Open cold water tap completely, slowly pour the material to the drain. Allow cold water to run for 5 minutes to completely flush the system. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG Not regulated

Note: No special precautions necessary.

Additional information
There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods.
If the item is not in a reagent set or kit, the classification given above applies.
If the item is part of a reagent set or kit the classification would change to the following:
UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.
If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories

TSCA	Complies
DSL/NDSL	Complies

TSCA- United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL- Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

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

TCSI- Taiwan Chemical Substances Inventory
AICS- Australian Inventory of Chemical Substances
NZIoC- New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any 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 (CAS #: 77-09-8)	0.1

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Acetone 67-64-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

U.S. - DEA (Drug Enforcement Administration) List I & List II

Chemical Name	U.S. - DEA (Drug Enforcement Administration) - List I or Precursor Chemicals	U.S. - DEA (Drug Enforcement Administration) - List II or Essential Chemicals
Acetone (0.1 - 1%) CAS#: 67-64-1	Not Listed	500 gallon Import/Export Volume; 1500 kg Import/Export Weight; 50 gallon Domestic Sales Volume; 150 kg Domestic Sales Weight

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Phenolphthalein (CAS #: 77-09-8)	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
1,2-Propanediol 57-55-6	X	-	X
Acetone	X	X	X

67-64-1			
Phenolphthalein 77-09-8	X	-	-

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA and HMIS Classifications

NFPA	**Health hazards** - 1	**Flammability** - 1	**Instability** - 0	**Physical and Chemical Properties** -
HMIS	**Health hazards** - 1	**Flammability** - 1	**Physical hazards** - 0	**Personal protection** - X - See section 8 for more information

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH	*Immediately Dangerous to Life or Health*
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	*no data*

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
MAC	Maximum Allowable Concentration	Ceiling	Ceiling Limit Value
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

Prepared By Hach Product Compliance Department

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Revision Date 01-Nov-2015

Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet