

Safety Data Sheet

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Identification of the substance or mixture

Product code 1856007
Product name Phenol Reagent

Company/undertaking identification

Life Technologies Corporation
5781 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

Thermo Fisher Scientific
Pierce Biotechnology
P.O. Box 117
Rockford, IL 61105
United States
1.815.968.0747 or
1.800.874.3723

24 hour Emergency Response for Hazardous Materials Within the USA + Canada: 1-800-424-9300 and +1
[or Dangerous Goods] Incident. Spill, Leak, Fire, 703-527-3887
Exposure, or Accident. Call CHEMTREC Outside the USA + Canada: +1 703-741-5970

Country Specific Emergency Number (if available):

Use as laboratory reagent
Scientific research and development

SECTION 2: Hazards identification

GHS - Classification

Signal Word
DANGER

Hazard pictograms



Health hazards

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1

Physical hazards

GHS Physical Hazard	Substances/mixtures corrosive to metal
GHS Physical Hazard Category Number	Category 1

Environmental hazards

Not classified

Hazard Statements

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

Precautionary Statements

Prevention

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

P234 - Keep only in original container

P264 - Wash hands thoroughly after handling

Response

P390 - Absorb spillage to prevent material damage

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

P363 - Wash contaminated clothing before reuse

P311 - Call a POISON CENTER or doctor

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

P310 - Immediately call a POISON CENTER or doctor/physician

Storage

P406 - Store in corrosion resistant container with a resistant inner liner

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards

Not Applicable

HMIS

Health	3
Flammability	0

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Reactivity	0
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SECTION 3: Composition/information on ingredients

Component	CAS No.	Common name	EINECS-No	Weight-%
Tungstate (WO ₄ ²⁻),disodium, dihydrate,(T-4)-10213-10-2 (1-3)	10213-10-2	-	-	1-3
Hydrogen chloride 7647-01-0 (3-5)	7647-01-0	-	231-595-7	3-5
Phosphoric acid 7664-38-2 (<10)	7664-38-2	-	231-633-2	<10
lithium sulphate 10377-48-7 (7-25)	10377-48-7	-	-	7-25

We recommend handling all chemicals with caution.

SECTION 4: First aid measures

Description of first aid measures

Skin contact	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Immediate medical attention is required.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Get medical attention if symptoms occur.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If symptoms persist, call a physician.
Notes to Physician	Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H290 - May be corrosive to metals H314 - Causes severe skin burns and eye damage

Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.
 No information available.

Special hazards arising from the substance or mixture

Not known.

Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Avoid contact with skin, eyes or clothing
Use personal protection equipment
See Section 8 for more detail

Environmental precautions

No special environmental precautions required.

Methods and material for containment and cleaning up

Soak up with inert absorbent material.

Reference to other sections

See section 8 for more information.

SECTION 7: Handling and storage

Precautions for safe handling

Always wear recommended Personal Protective Equipment. See Section 8 for more detail. Do not get in eyes, on skin, or on clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers. Store in accordance with local regulations.

Specific end use(s)

Use as laboratory reagent. Scientific research and development.

SECTION 8: Exposure controls/personal protection

Control parameters

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Tungstate (WO42-),disodium, dihydrate,(T-4)-	None	None	3 mg/m ³	None
Hydrogen chloride	None	5 ppm 7 mg/m ³	None	None
Phosphoric acid	1 mg/m ³	None	1 mg/m ³	3 mg/m ³
lithium sulphate	None	None	None	None

Chemical Name	Brazil - OEL - TWAs (LTs)	Brazil - OEL - Ceilings	Brazil - OEL - Skin Designations
Tungstate (WO42-),disodium, dihydrate,(T-4)-	None	None	None
Hydrogen chloride	None	4 ppm 5.5 mg/m ³	None
Phosphoric acid	None	None	None
lithium sulphate	None	None	None

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Exposure controls

Personal Protective Equipment

Respiratory protection	In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.
Hand protection	Glove material: Nitrile rubber. with thickness (mm). :5. Break through time. (hours). :1. Recommended glove type has not been tested for use with product. Information is based on professional Knowledge.
Eye protection	Tight sealing safety goggles.
Skin and Body Protection	Wear laboratory coat for body protection.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls

No special environmental precautions required.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	liquid	
Color	yellow	
Odor	pungent	
Odor Threshold	Mixture has not been tested	
pH	<0.5	
Melting point / melting range	°C Mixture has not been tested	°F Mixture has not been tested
Boiling point / boiling range	°C Mixture has not been tested	°F Mixture has not been tested
Flash point	°C Mixture has not been tested	°F Mixture has not been tested
Autoignition Temperature	°C Mixture has not been tested	°F Mixture has not been tested
Decomposition temperature	°C Mixture has not been tested	°F Mixture has not been tested
Evaporation rate	No data	
Flammability (solid, gas)	Not Applicable	
Upper explosion limit	Mixture has not been tested	
Lower explosion limit	Mixture has not been tested	
Vapor Pressure	Mixture has not been tested	
Relative density	Mixture has not been tested	
Specific gravity	No data	
Solubility	Mixture has not been tested	
Partition coefficient: n-octanol/water	No data	
Viscosity	Mixture has not been tested	
Explosive properties	Mixture has not been tested	
Oxidizing properties	Mixture has not been tested	

Other information

No data.

SECTION 10: Stability and reactivity

Reactivity	None known.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	Hazardous reaction has not been reported.
Conditions to avoid	No information available.
Incompatible materials	No dangerous reaction known under conditions of normal use.
Hazardous decomposition products	No known hazardous decomposition products.

SECTION 11: Toxicological information

Information on toxicological effects

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Tungstate (WO ₄ ²⁻), disodium, dihydrate, (T-4)-	= 1190 mg/kg (Rat)	No data available	No data available
Hydrogen chloride	238 - 277 mg/kg (Rat)	No data available	= 1.68 mg/L (Rat)
Phosphoric acid	= 1530 mg/kg (Rat)	No data available	> 850 mg/m ³ (Rat)
lithium sulphate	= 1190 mg/kg (Mouse) = 613 mg/kg (Rat)	No data available	No data available

Principal Routes of Exposure

Skin corrosion/irritation Conclusive but not sufficient for classification

Serious eye damage/irritation Causes serious eye damage

Respiratory or skin sensitization Conclusive but not sufficient for classification

Specific target organ toxicity (STOT) – single exposure Conclusive but not sufficient for classification

Specific target organ toxicity (STOT) – repeated exposure Conclusive but not sufficient for classification

Carcinogenicity Conclusive but not sufficient for classification

Germ cell mutagenicity Conclusive but not sufficient for classification

Reproductive toxicity Conclusive but not sufficient for classification

Aspiration hazard Conclusive but not sufficient for classification

SECTION 12: Ecological information

Toxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Tungstate (WO42-),disodium, dihydrate,(T-4)-	No data available	No data available	No data available	No data available	No data available
Hydrogen chloride	No data available	No data available	No data available	No data available	No data available
Phosphoric acid	No data available	Daphnia magna EC50=4.6 mg/L (12 h)	No data available	No data available	No data available
lithium sulphate	No data available	No data available	No data available	No data available	No data available

Persistence and degradability No information available.

Bioaccumulative potential No information available.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other adverse effects No information available.

SECTION 13: Disposal considerations

Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in according to approved disposal technique. Disposal of this product, its solutions or of any by-products, shall comply with the requirements of all applicable local, regional or national/federal regulations.

SECTION 14: Transport information

IATA / ADR / DOT-US / IMDG

Classified as dangerous in the meaning of transport regulations

UN number	UN3264
UN proper shipping name	Corrosive liquid,Acidic, Inorganic, n.o. s. (Hydrogen chloride,Phosphoric acid)
Transport hazard class(es)	8
Packing group	III

Environmental hazards

Not Applicable

Special precautions for user

Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not Applicable.

SECTION 15: Regulatory information

Component	US TSCA
Tungstate (WO42-),disodium, dihydrate,(T-4)- 10213-10-2 (1-3)	-
Hydrogen chloride 7647-01-0 (3-5)	Listed
Phosphoric acid 7664-38-2 (<10)	Listed
lithium sulphate 10377-48-7 (7-25)	Listed

US Federal Regulations

SARA 313

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers.

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>SARA 313 - Threshold Values</u>
Hydrogen chloride	7647-01-0	3-5	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs

<u>Component</u>	<u>CAS No.</u>	<u>Weight-%</u>	<u>HAPS data</u>
Hydrogen chloride 7647-01-0 (3-5)	7647-01-0	3-5	Present

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

D2B - Toxic materials

E - Corrosive material



This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

National Regulations - Brazil

<u>Chemical Name</u>	<u>CAS No.</u>	<u>Brazil - National Agency for Sanitary Surveillance (ANVISA)</u>	<u>Brazil - National List of Carcinogen Agents to Humans (LINACH)</u>
Tungstate (WO42-),disodium,	10213-10-2	Not Listed	Not Listed

dihydrate,(T-4)-			
Hydrogen chloride	7647-01-0	Schedule D2	Not Listed
Phosphoric acid	7664-38-2	Not Listed	Not Listed
lithium sulphate	10377-48-7	Not Listed	Not Listed

SECTION 16: Other information

Reason for revision SDS sections updated.
Revision number 6
Revision date 27-Mar-2019

Use as laboratory reagent. Scientific research and development.

References

- ECHA: <http://echa.europa.eu/>
- TOXNET: <http://toxnet.nlm.nih.gov/>
- eChemPortal: <http://www.echemportal.org/>
- LOLI database: <https://www.chemadvisor.com/loli-database>

"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE"

End of Safety Data Sheet