

# Safety Data Sheet

acc. to OSHA HCS

Revision date 08/23/2024

## 1 Identification

- **Product identifier**
- **Product Name: Phenol Standard (1X1 mL)**
- **Part number:** PHM-814-1
- **Application of the substance / the mixture** Reagents and Standards for Analytical Chemical Laboratory Use
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Agilent Technologies, Inc.  
5301 Stevens Creek Blvd.  
Santa Clara, CA 95051 USA
- **Information department:**  
Telephone: 800-227-9770  
e-mail: pdl-msds\_author@agilent.com
- **Emergency telephone number:** CHEMTREC®: 1-800-424-9300

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carcinogenicity 1A

H350 May cause cancer.



GHS07

Acute Toxicity - Oral 4

H302 Harmful if swallowed.

Acute Toxicity - Inhalation 4

H332 Harmful if inhaled.

Eye Irritation 2A

H319 Causes serious eye irritation.

Sensitization - Skin 1

H317 May cause an allergic skin reaction.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**  
propan-2-ol

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**Product Name: Phenol Standard (1X1 mL)**

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pentachlorophenol

DNOC

2,4-dichlorophenol

**Hazard statements**

H225 Highly flammable liquid and vapor.

H302+H332 Harmful if swallowed or if inhaled.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H350 May cause cancer.

H336 May cause drowsiness or dizziness.

**Precautionary statements**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray

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

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing must not be allowed out of the workplace.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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 on this label).

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

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

P363 Wash contaminated clothing before reuse.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P330 Rinse mouth.

P370+P378 In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Classification system:**
**NFPA ratings (scale 0 - 4)**


Health = 2

Fire = 3

Reactivity = 0

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## · HMIS-ratings (scale 0 - 4)

HEALTH	2	Health = *2
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

## · Other hazards

## · Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

## 3 Composition/information on ingredients

### · Chemical characterization: Mixtures

· **Description:** Mixture of the substances listed below with nonhazardous additions.

### · Dangerous components:

67-63-0	propan-2-ol	97.7095%
59-50-7	chlorocresol	0.2545%
87-86-5	pentachlorophenol	0.2545%
88-06-2	2,4,6-trichlorophenol	0.2545%
95-48-7	o-cresol	0.2545%
100-02-7	4-nitrophenol	0.2545%
108-95-2	phenol	0.2545%
120-83-2	2,4-dichlorophenol	0.2545%
534-52-1	DNOC	0.2545%

## 4 First-aid measures

### · Description of first aid measures

#### · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

#### · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

#### · After skin contact: Immediately wash with water and soap and rinse thoroughly.

#### · After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

#### · After swallowing: Immediately call a doctor.

#### · Information for doctor:

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

#### · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

67-63-0	propan-2-ol	400 ppm
59-50-7	chlorocresol	5.5 mg/m <sup>3</sup>
87-86-5	pentachlorophenol	1 mg/m <sup>3</sup>
88-06-2	2,4,6-trichlorophenol	2.5 mg/m <sup>3</sup>
88-75-5	2-nitrophenol	2.1 mg/m <sup>3</sup>
100-02-7	4-nitrophenol	0.69 mg/m <sup>3</sup>
108-95-2	phenol	15 ppm
120-83-2	2,4-dichlorophenol	0.2 ppm
534-52-1	DNOC	0.6 mg/m <sup>3</sup>

· **PAC-2:**

67-63-0	propan-2-ol	2000* ppm
59-50-7	chlorocresol	60 mg/m <sup>3</sup>
87-86-5	pentachlorophenol	15 mg/m <sup>3</sup>
88-06-2	2,4,6-trichlorophenol	27 mg/m <sup>3</sup>
88-75-5	2-nitrophenol	11 mg/m <sup>3</sup>
100-02-7	4-nitrophenol	7.6 mg/m <sup>3</sup>
108-95-2	phenol	23 ppm
120-83-2	2,4-dichlorophenol	2 ppm
534-52-1	DNOC	0.65 mg/m <sup>3</sup>

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<b>· PAC-3:</b>		
67-63-0	propan-2-ol	12000** ppm
59-50-7	chlorocresol	360 mg/m <sup>3</sup>
87-86-5	pentachlorophenol	150 mg/m <sup>3</sup>
88-06-2	2,4,6-trichlorophenol	160 mg/m <sup>3</sup>
88-75-5	2-nitrophenol	66 mg/m <sup>3</sup>
100-02-7	4-nitrophenol	46 mg/m <sup>3</sup>
108-95-2	phenol	200 ppm
120-83-2	2,4-dichlorophenol	20 ppm
534-52-1	DNOC	5 mg/m <sup>3</sup>

## 7 Handling and storage

- Handling:**
- Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities**
- Storage:**
- Requirements to be met by storerooms and receptacles:** Store in a cool location.
- Information about storage in one common storage facility:** Not required.
- Further information about storage conditions:**  
Keep receptacle tightly sealed.  
Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- Additional information about design of technical systems:** No further data; see section 7.
- Control parameters**
- Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the other constituents have no known exposure limits.

### 67-63-0 propan-2-ol

PEL	Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
REL	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

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**87-86-5 pentachlorophenol**

PEL	Long-term value: 0.5 mg/m <sup>3</sup> Skin
REL	Long-term value: 0.5 mg/m <sup>3</sup> Skin
TLV	Short-term value: 1* mg/m <sup>3</sup> Long-term value: 0.5* mg/m <sup>3</sup> Skin; BEI,*inh. fraction+vapor, A3

**95-48-7 o-cresol**

PEL	Long-term value: 22 mg/m <sup>3</sup> , 5 ppm Skin
REL	Long-term value: 10 mg/m <sup>3</sup> , 2.3 ppm
TLV	Long-term value: 20* mg/m <sup>3</sup> Skin;*as inhalable fraction and vapor, A4

**108-95-2 phenol**

PEL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Skin
REL	Long-term value: 19 mg/m <sup>3</sup> , 5 ppm Ceiling limit value: 60* mg/m <sup>3</sup> , 15.6* ppm *15-min; Skin
TLV	Long-term value: 5 ppm Skin; BEI, A4

**120-83-2 2,4-dichlorophenol**

WEEL	Long-term value: 1 ppm Skin; Q
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**534-52-1 DNOC**

PEL	Long-term value: 0.2 mg/m <sup>3</sup> Skin
REL	Long-term value: 0.2 mg/m <sup>3</sup> Skin
TLV	Long-term value: 0.2* mg/m <sup>3</sup> *inhalable fraction + vapor; Skin

**· Ingredients with biological limit values:**
**67-63-0 propan-2-ol**

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
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**87-86-5 pentachlorophenol**

BEI	- Medium: urine Time: prior to last shift of workweek Parameter: Pentachlorophenol with hydrolysis (nonquantitative)
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**108-95-2 phenol**

BEI	250 mg/g creatinine
	Medium: urine
	Time: end of shift
	Parameter: Phenol with hydrolysis (background, nonspecific)

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

When used as intended with Agilent instruments, the use of the product under normal laboratory conditions and with standard practices does not result in significant airborne exposures and therefore respiratory protection is not needed.

Under an emergency condition where a respirator is deemed necessary, use a NIOSH or equivalent approved device/equipment with appropriate organic or acid gas cartridge.

· **Protection of hands:**

Although not recommended for constant contact with the chemicals or for clean-up, nitrile gloves 11-13 mil thickness are recommended for normal use. The breakthrough time is 1 hr. For cleaning a spill where there is direct contact of the chemical, butyl rubber gloves are recommended 12-15 mil thickness with breakthrough times exceeding 4 hrs. Supplier recommendations should be followed.

· **Material of gloves**

For normal use: nitrile rubber, 11-13 mil thickness

For direct contact with the chemical: butyl rubber, 12-15 mil thickness

· **Penetration time of glove material**

For normal use: nitrile rubber: 1 hour

For direct contact with the chemical: butyl rubber: >4 hours

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Fluid

Color: Clear

· **Odor:** Alcohol-like

· **Odor threshold:** Not determined.

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· <b>pH-value:</b>	Not determined.
· <b>Change in condition</b> <b>Melting point/Melting range:</b> <b>Boiling point/Boiling range:</b>	-89.5 °C (-129.1 °F) 82 °C (179.6 °F)
· <b>Flash point:</b>	12 °C (53.6 °F)
· <b>Flammability (solid, gaseous):</b>	Highly flammable.
· <b>Auto igniting:</b>	425 °C (797 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· <b>Explosion limits:</b> <b>Lower:</b> <b>Upper:</b>	2 Vol % 12 Vol %
· <b>Vapor pressure at 20 °C (68 °F):</b>	35 hPa (26.3 mm Hg)
· <b>Density at 20 °C (68 °F):</b> · <b>Relative density</b> · <b>Vapor density</b> · <b>Evaporation rate</b>	0.785 g/cm <sup>3</sup> (6.55083 lbs/gal) Not determined. Not determined. Not determined.
· <b>Solubility in / Miscibility with</b> <b>Water at 20 °C (68 °F):</b>	1 g/l
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b> <b>Dynamic:</b> <b>Kinematic:</b>	Not determined. Not determined.
· <b>Solvent content:</b> <b>Organic solvents:</b> <b>VOC content:</b>	98.2 % 98.22 % 982.2 g/l / 8.20 lb/gal
<b>Solids content:</b>	2.3 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

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· **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

### ATE (Acute Toxicity Estimate)

Oral	LD50	1,803 mg/kg (rat)
Dermal	LD50	18,371 mg/kg
Inhalative	LC50/4 h	17.9 mg/L

### 67-63-0 propan-2-ol

Oral	LD50	4,710 mg/kg (rat)
Dermal	LD50	12,800 mg/kg (rat) 12,800 mg/kg (rabbit)
Inhalative	LC50/4 h	72.6 mg/L (rat)

### 59-50-7 chlorocresol

Oral	LD50	1,830 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)

### 87-86-5 pentachlorophenol

Oral	LD50	27 mg/kg (rat)
Dermal	LD50	96 mg/kg (rat)
Inhalative	LC50/4 h	355 mg/L (rat)

### 88-06-2 2,4,6-trichlorophenol

Oral	LD50	820 mg/kg (rat)
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### 95-48-7 o-cresol

Oral	LD50	121 mg/kg (rat)
Dermal	LD50	890 mg/kg (rabbit)

### 100-02-7 4-nitrophenol

Oral	LD50	202 mg/kg (rat)
Dermal	LD50	1,024 mg/kg (rat)

### 108-95-2 phenol

Oral	LD50	282 mg/kg (rat)
Dermal	LD50	660 mg/kg (rat) 850 mg/kg (rabbit)

### 120-83-2 2,4-dichlorophenol

Oral	LD50	47 mg/kg (rat)
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### 534-52-1 DNOC

Oral	LD50	7 mg/kg (rat)
Dermal	LD50	200 mg/kg (rat) 1,000 mg/kg (rabbit)

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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant

- **Carcinogenic categories**

**· IARC (International Agency for Research on Cancer)**

67-63-0	propan-2-ol	3
87-86-5	pentachlorophenol	1
88-06-2	2,4,6-trichlorophenol	2B
108-95-2	phenol	3
120-83-2	2,4-dichlorophenol	2B

**· NTP (National Toxicology Program)**

87-86-5	pentachlorophenol	R
88-06-2	2,4,6-trichlorophenol	R

**· OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |  |   |
|--|---|
| · <b>Not Regulated, De minimis Quantities</b>  | -   |
| · <b>UN-Number</b><br>· <b>DOT, IMDG, IATA</b>   | UN1993  |
| · <b>UN proper shipping name</b><br>· <b>DOT</b><br>· <b>IMDG, IATA</b>  | Flammable liquids, n.o.s. (Isopropanol)<br>FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)) |
| · <b>Transport hazard class(es)</b><br>· <b>DOT</b>  |   |
|   |   |
| · <b>Class</b><br>· <b>Label</b>   | 3 Flammable liquids<br>3  |
| · <b>IMDG, IATA</b>  |   |
|   |   |
| · <b>Class</b><br>· <b>Label</b>   | 3 Flammable liquids<br>3  |
| · <b>Packing group</b><br>· <b>DOT, IMDG, IATA</b>   | II  |
| · <b>Environmental hazards:</b>  | Not applicable.   |
| · <b>Special precautions for user</b><br>· <b>Hazard identification number (Kemler code):</b><br>· <b>EMS Number:</b><br>· <b>Stowage Category</b> | Warning: Flammable liquids<br>33<br>F-E, <u>S</u> -E<br>B   |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>   | Not applicable.   |
| · <b>Transport/Additional information:</b><br>· <b>DOT</b><br>· <b>Quantity limitations</b>  | On passenger aircraft/rail: 5 L<br>On cargo aircraft only: 60 L                                       |

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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul> | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | UN 1993 FLAMMABLE LIQUID, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL)), 3, II   |

## 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Sara

### · Section 355 (extremely hazardous substances):

95-48-7	o-cresol
108-95-2	phenol
534-52-1	DNOC

### · Section 313 (Specific toxic chemical listings):

67-63-0	propan-2-ol
87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
88-75-5	2-nitrophenol
95-48-7	o-cresol
100-02-7	4-nitrophenol
108-95-2	phenol
120-83-2	2,4-dichlorophenol
534-52-1	DNOC

### · TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

### · Hazardous Air Pollutants

87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol
95-48-7	o-cresol
100-02-7	4-nitrophenol
108-95-2	phenol
534-52-1	DNOC

### · Proposition 65

#### · Chemicals known to cause cancer:

87-86-5	pentachlorophenol
88-06-2	2,4,6-trichlorophenol

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

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**· Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**· Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

**· Carcinogenic categories**
**· EPA (Environmental Protection Agency)**

87-86-5	pentachlorophenol	L
88-06-2	2,4,6-trichlorophenol	B2
95-48-7	o-cresol	C
108-95-2	phenol	D, I

**· TLV (Threshold Limit Value)**

67-63-0	propan-2-ol	A4
87-86-5	pentachlorophenol	A3
108-95-2	phenol	A4

**· NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

**· National regulations:**
**· Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.  
Exceptions can be made by the authorities in certain cases.

**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation.  
No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

**· Department issuing SDS:** Document Control / Regulatory

**· Contact:** pdl-acg-regulatory-cq@agilent.com

**· Date of preparation / last revision** 08/23/2024 / 3

**· Abbreviations and acronyms:**

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
DOT: US Department of Transportation  
IATA: International Air Transport Association  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
VOC: Volatile Organic Compounds (USA, EU)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
NIOSH: National Institute for Occupational Safety  
OSHA: Occupational Safety & Health  
TLV: Threshold Limit Value  
PEL: Permissible Exposure Limit

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**Safety Data Sheet**  
**acc. to OSHA HCS**

Printing date 08/23/2024

Revision date 08/23/2024

**Product Name: Phenol Standard (1X1 mL)**

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REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Sensitization - Skin 1: Skin sensitisation – Category 1

Carcinogenicity 1A: Carcinogenicity – Category 1A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3

· **\* Data compared to the previous version altered.**

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