

Safety Data Sheet

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

Identification of the substance or mixture

Product code AM9720
Product name ACID PHENOL:CHLOROFORM 100 ML

Company/undertaking identification

Thermo Fisher Scientific Baltics UAB
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Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

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

Country Specific Emergency Number (if available):

For In Vitro Diagnostic Use

SECTION 2: Hazards identification

GHS Classification

Signal Word
DANGER

Hazard pictograms



Health hazards

| | |
|---|----------------------|
| Acute oral toxicity | Category 3 |
| Acute dermal toxicity | Category 3 |
| Acute inhalation toxicity - vapor | Category 3 |
| Skin corrosion/irritation | Category 1 B |
| Specific target organ toxicity (STOT) – repeated exposure | Category 1 |
| | |
| Carcinogenicity | Category 2 |
| Reproductive Toxicity | Category 2 |
| Germ cell mutagenicity | Mutagenic category 2 |

Physical hazards

Not classified

Environmental hazards

Not classified

Hazard Statements

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled
 H314 - Causes severe skin burns and eye damage
 H341 - Suspected of causing genetic defects
 H351 - Suspected of causing cancer
 H361 - Suspected of damaging fertility or the unborn child
 H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary Statements

Prevention

P264 - Wash hands thoroughly after handling
 P280 - Wear protective gloves/protective clothing/eye protection/face protection
 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
 P201 - Obtain special instructions before use
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Response

P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

Storage

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

Disposal

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

Other hazards

Not Applicable

HMIS

| | |
|--------------|--------------------|
| Health | 4 * Chronic Hazard |
| Flammability | 0 |
| Reactivity | 0 |

SECTION 3: Composition/information on ingredients

| Chemical Name | CAS No. | Common name | EINECS-No | Weight-% |
|---------------|----------|----------------|-----------|----------|
| Chloroform | 67-66-3 | Not applicable | 200-663-8 | 10 - 30 |
| Phenol | 108-95-2 | Not applicable | 203-632-7 | 30 - 60 |

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. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Do not induce vomiting without medical advice. If swallowed, rinse mouth with water (only if the person is conscious). Get medical attention if symptoms occur.

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Notes to Physician

Treat symptomatically.

Most important symptoms and effects, both acute and delayed

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled H314 - Causes severe skin burns and eye damage H341 - Suspected of causing genetic defects H351 - Suspected of causing cancer H361 - Suspected of damaging fertility or the unborn child H372 - Causes damage to organs through prolonged or repeated exposure

Indication of any immediate medical attention and special treatment needed

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Carbon oxides

Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation
Always wear recommended Personal Protective Equipment
Use personal protection equipment
See section 8 for more information

Environmental precautions

Prevent product from entering drains.

Methods and material for containment and cleaning up

Ventilate the area. 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

Avoid breathing vapors or mists. Avoid contact with eyes, skin and clothing. Wash hands before breaks and immediately after handling the product. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Specific end use(s)

For In Vitro Diagnostic Use.

SECTION 8: Exposure controls/personal protection

Control parameters

| Chemical Name | OSHA PEL | OSHA PEL (Ceiling) | ACGIH OEL (TWA) | ACGIH OEL (STEL) |
|---------------|-------------------------------|---------------------------------|-----------------|------------------|
| Chloroform | None | 50 ppm 240 mg/m ³ | 10 ppm | None |
| Phenol | 5 ppm 19 mg/m ³ | None | 5 ppm | None |

| Chemical Name | Brazil - OEL - TWAs (LTs) | Brazil - OEL - Ceilings | Brazil - OEL - Skin Designations |
|---------------|--------------------------------|-------------------------|----------------------------------|
| Chloroform | 20 ppm 94 mg/m ³ | None | None |
| Phenol | 4 ppm 15 mg/m ³ | None | skin designation |

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 Wear suitable gloves. Glove material: Compatible chemical-resistant gloves.

Eye protection Tight sealing safety goggles.

Skin and Body Protection Wear suitable protective clothing.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice

Environmental exposure controls
Prevent product from entering drains.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| | | |
|---|-------------------|------------|
| Physical state | liquid | |
| Color | No data | |
| Odor | characteristic | |
| Molecular Weight | No data | |
| Melting point / melting range | °C No data | °F No data |
| Boiling point / boiling range | °C No data | °F No data |
| Flammability (solid, gas) | No data available | |
| Lower explosion limit | No data | |
| Upper explosion limit | No data | |
| Flash point | °C No data | °F No data |
| Autoignition Temperature | °C No data | °F No data |
| Decomposition temperature | °C No data | °F No data |
| Evaporation rate | No data | |
| Viscosity | No data | |
| Solubility | No data available | |
| Partition coefficient: n-octanol/water | No data available | |
| Vapor Pressure | No data | |
| Specific gravity | No data | |
| Relative density | No data | |
| Vapor density | No data | |
| Explosive properties | No data | |
| Oxidizing properties | No data | |
| Particle characteristics | No data | |

Other information

Information with regard to physical hazard classes

No information available

Other safety characteristics

No information available

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 | Heat. |
| Incompatible materials | Strong oxidizing agents. |
| Hazardous decomposition products | Carbon oxides. Hydrogen chloride gas. |

SECTION 11: Toxicological information

Information on toxicological effects

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---------------|-------------------|---------------------|-------------------------------|
| Chloroform | = 450 mg/kg (Rat) | > 20 g/kg(Rabbit) | =47702mg/m ³ (Rat) |
| Phenol | = 340 mg/kg (Rat) | = 630 mg/kg(Rabbit) | No data available |

Principal Routes of Exposure

| | |
|--|--|
| Acute toxicity | Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. |
| Skin corrosion/irritation | Causes severe burns |
| Serious eye damage/irritation | Causes serious eye damage |
| Respiratory or skin sensitization | Data are conclusive but insufficient for classification |
| Specific target organ toxicity (STOT) – single exposure | Data are conclusive but insufficient for classification |
| Specific target organ toxicity (STOT) – repeated exposure | May cause damage to organs through prolonged or repeated exposure |
| Carcinogenicity | Contains a known or suspected carcinogen |
| Germ cell mutagenicity | Product is or contains a chemical which may cause mutations in the germ cells of humans. |
| Reproductive toxicity | Product is or contains a chemical which is a known or suspected reproductive hazard |
| Aspiration hazard | Data are conclusive but insufficient for classification |

SECTION 12: Ecological information

Toxicity

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Microtox Data | log Pow |
|---------------|--|--|-------------------|-------------------|------------|
| Chloroform | No data available | Daphnia magna EC50=29 mg/L (48 h) | No data available | No data available | logPow2 |
| Phenol | Desmodesmus subspicatus EC50 187 - 279 mg/L (72 h) Pseudokirchneriella subcapitata EC50 46.42 mg/L (96 h) | Daphnia magna EC50 4.24 - 10.7 mg/L (48 h) Daphnia magna EC50 10.2 - 15.5 mg/L (48 h) | No data available | No data available | logPow1.47 |

Mobility in soil No information available.

Persistence and degradability Readily biodegradable.

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 accordance with 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

INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA)

This product is classified as dangerous goods, per the International Air Transport Association.

| | |
|-----------------------------------|---|
| UN number or ID number | 2810 |
| UN proper shipping name | TOXIC LIQUID, ORGANIC, N.O.S. (PHENOL/CHLOROFORM SOLUTION) |
| Transport hazard class(es) | 6.1 |
| Packing group | III |

Marine pollutant

No

Revision date 30-Jun-2022
Product code AM9720

Page 8 / 11
Product name ACID PHENOL:CHLOROFORM 100 ML

Environmental hazards
IMDG Marine pollutant: No

Special precautions for user
Not Applicable

Maritime transport in bulk according to IMO instruments
Not Applicable.

SECTION 15: Regulatory information

| Component | US TSCA |
|-----------------------------------|---------|
| Chloroform 67-66-3 (10 - 30) | Listed |
| Phenol 108-95-2 (30 - 60) | 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> |
|----------------------|----------------|-----------------|------------------------------------|
| Chloroform | 67-66-3 | 10 - 30 | 0.1 |
| Phenol | 108-95-2 | 30 - 60 | 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> |
|-----------------------------------|----------------|-----------------|------------------|
| Chloroform 67-66-3 (10 - 30) | 67-66-3 | 10 - 30 | Present |
| Phenol 108-95-2 (30 - 60) | 108-95-2 | 30 - 60 | Present |

US State Regulations

| Chemical Name | Massachusetts - RTK (Right-to-Know) | New Jersey - RTK (Right-to-Know) | Pennsylvania - RTK (Right-to-Know) |
|---------------|-------------------------------------|----------------------------------|------------------------------------|
| Chloroform | Listed | Listed | Listed |
| Phenol | Listed | Listed | Listed |

California Proposition 65

This product contains the following Proposition 65 chemicals:.

| <u>Chemical Name</u> | <u>CAS No.</u> | <u>Weight-%</u> | <u>Category</u> |
|----------------------|----------------|-----------------|-----------------------------|
| Chloroform | 67-66-3 | 10 - 30 | Carcinogen Developmental |

WHMIS Hazard Class

D2A - Very 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> |
|----------------------|----------------|--|---|
| Chloroform | 67-66-3 | Schedule D2 | Group 2B Group 2A |
| Phenol | 108-95-2 | Not Listed | Not Listed |

SECTION 16: Other information

Reason for revision SDS sections updated.
Revision number 7
Revision date 30-Jun-2022

For In Vitro Diagnostic Use.

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>

Abbreviations and acronyms

TWA - Time-Weighted Average
OELs - Occupational Exposure Limits
STEL - Short Term Exposure Limit
DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List
KECL - Korean Existing and Evaluated Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
CEPA - Canadian Environmental Protection Act
EPA - Environmental Protection Agency
OSHA - Occupational Safety and Health Administration of the US Department of Labor
IATA - International Air Transport Association
DOT - Department of Transportation
IMDG - International Maritime Dangerous Goods
ACGIH - American Conference of Governmental Industrial Hygienists
NIOSH - National Institute for Occupational Safety and Health

Revision date 30-Jun-2022
Product code AM9720

Page 10 / 11
Product name ACID PHENOL:CHLOROFORM 100 ML

AIHA - American Industrial Hygiene Association
HMIS - Department of Defense Hazardous Materials Information System
NTP - National Toxicology Program
IARC - International Agency for Research on Cancer

"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