

F34288 Perchloric acid 1,0M 1,00LFL

00000021971

Version 1.0

Revision Date 01/23/2017

Print Date 10/17/2019

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Perchloric acid solution

Number : 00000021971

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171
(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414
: Transportation (CHEMTREC): 1-800-424-9300 or
+1-703-527-3887
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid

Odor : no data available

Classification of the substance or mixture

Classification of the substance or mixture : Skin irritation, Category 2
Eye irritation, Category 2A

GHS Label elements, including precautionary statements

Symbol(s) :



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Signal word : Warning

Hazard statements : Causes skin irritation.
Causes serious eye irritation.

Precautionary statements : **Prevention:**
Wash skin thoroughly after handling.
Wear protective gloves/protective clothing/eye protection/face protection.

Response:
IF ON SKIN: Wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/ attention.
If eye irritation persists: Get medical advice/ attention.
Take off contaminated clothing and wash before reuse.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Water	7732-18-5	>=90.00 - <=100.00 %
Perchloric acid	7601-90-3	>=5.00 - <10.00 %

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Immediately take off contaminated clothing and rinse body with plenty of water.

Inhalation : If inhaled, remove to fresh air. Call a physician if irritation

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- develops or persists.
- Skin contact : After contact with skin, wash immediately with plenty of water. If symptoms persist, call a physician.
- Eye contact : Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. Remove contact lenses. Call a physician immediately.
- Ingestion : Clean mouth with water and drink afterwards plenty of water. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder
- Specific hazards during firefighting : The product itself does not burn.
In case of fire hazardous decomposition products may be produced such as:
Chlorine (Cl₂)
Hydrogen chloride gas
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
No unprotected exposed skin areas.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Avoid breathing vapours, mist or gas.
Avoid contact with skin, eyes and clothing.
- Environmental precautions : Prevent further leakage or spillage if safe to do so.
Discharge into the environment must be avoided.
Do not flush into surface water or sanitary sewer system.

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Do not allow run-off from fire fighting to enter drains or water courses.

Methods for cleaning up : Use mechanical handling equipment.
Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

Handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Avoid breathing vapours, mist or gas.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Requirements for storage areas and containers : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Protect from physical damage.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid breathing vapours, mist or gas.
Avoid contact with skin, eyes and clothing.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety goggles

Hand protection : Protective gloves
Gloves must be inspected prior to use.
Replace when worn.

Skin and body protection : Wear suitable protective equipment.
Wear as appropriate:

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Respiratory protection : Protective suit
: In case of insufficient ventilation wear suitable respiratory equipment.

Hygiene measures : Take off all contaminated clothing immediately.
Keep working clothes separately.
Remove and wash contaminated clothing before re-use.
Wash hands before breaks and at the end of workday.
Avoid contact with the skin and the eyes.
When using do not eat or drink.

Exposure Guidelines

Contains no substances with occupational exposure limit values.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

Odor : no data available

Odor threshold : Note: no data available

pH : Note: no data available

Melting point/freezing point : Note: no data available

Boiling point/boiling range : Note: no data available

Flash point : Note: no data available

Lower explosion limit : Note: no data available

Upper explosion limit : Note: no data available

Vapor pressure : Note: no data available

Vapor density : Note: no data available

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Density : 1.054 g/cm³

Water solubility : Note: no data available

Partition coefficient:
n-octanol/water : Note: no data available

Ignition temperature : Note: no data available

Decomposition temperature : Note: no data available

Viscosity, dynamic : Note: no data available

Oxidizing properties : Note: no data available

Molecular weight : 100.46 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : None known.

Conditions to avoid : No information available.

Incompatible materials to avoid : Strong bases
Strong acids
Amines
Alcohols
Organic materials
Powdered metals
Strong reducing agents

Hazardous decomposition products : Chlorine (Cl₂)
Hydrogen chloride gas

SECTION 11. TOXICOLOGICAL INFORMATION

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Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg
Method: Calculation method

Acute inhalation toxicity : Note: no data available

Acute dermal toxicity : Note: no data available

Skin irritation : Result: Irritating to skin.

Eye irritation : Result: Irritating to eyes.

Sensitisation : Note: no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish : Note: no data available

Toxicity to daphnia and other aquatic invertebrates : Note: no data available

Toxicity to algae : Note: no data available

Further information on ecology

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

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TDG Not dangerous goods**IATA** Not dangerous goods**IMDG** Not dangerous goods**SECTION 15. REGULATORY INFORMATION****Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Toxic Chemical Control Law (TCCL) List : On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

National regulatory information**SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : Acute Health Hazard

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Perchloric acid 7601-90-3

New Jersey RTK : Perchloric acid 7601-90-3

Pennsylvania RTK : Perchloric acid 7601-90-3

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2	2
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group