

**Pentanochlor solution 100 µg/mL
in acetonitrile, ref.mat.
R1362-2ML**

Version 1.0

Issuing date 11/13/2018

Revision Date 11/27/2018

Print Date 08/07/2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

- Trade name : Pentanochlor solution 100 µg/mL
in acetonitrile, ref.mat.
- Number : 000000023610
- Recommended use of the chemical and restrictions on use : Laboratory chemicals, Reference Standard
- Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926
- For further information, please contact: : 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**
: **In Japan: +(81)-345209637**
: (24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture**

- Classification of the substance or mixture : Flammable liquids, Category 2
Acute toxicity, Category 4, Inhalation
Acute toxicity, Category 4, Oral
Eye irritation, Category 2A
Specific target organ toxicity - single exposure, Category 1,
Central nervous system

GHS Label elements, including precautionary statements

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Symbol(s)

:



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.
Harmful if swallowed.
Harmful if inhaled.
Causes serious eye irritation.
Causes damage to organs.

Precautionary statements

: **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.
Keep container tightly closed.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

IF exposed: Call a POISON CENTER or doctor/ physician. Rinse mouth.

If eye irritation persists: Get medical advice/ attention.

In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:

Store in a well-ventilated place. Keep cool.
Store locked up.

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Disposal:

Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Mixture

Chemical name	CAS-No.	Concentration
Acetonitrile	75-05-8	99.90 - 100.00 %
Acetonitrile		
Pentanochlor	2307-68-8	<0.10 %
Pentanochlor		

Note: Type 2 Monitoring Chemicals (Designated substances)

4. FIRST AID MEASURES

- General advice : First aider needs to protect himself.
Move out of dangerous area.
Take off all contaminated clothing immediately.
- Inhalation : Remove to fresh air.
If not breathing, give artificial respiration.
If breathing is difficult, give oxygen.
Use oxygen as required, provided a qualified operator is present.
Call a physician.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.
Call a physician if irritation develops or persists.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Protect unharmed eye.
Call a physician immediately.
- Ingestion : Do not induce vomiting without medical advice.
Never give anything by mouth to an unconscious person.

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If victim is fully conscious, give a cupful of water.
Call a physician.

Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Carbon dioxide (CO₂)
Dry powder
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : Flammable.
Vapours may form explosive mixtures with air.
Vapours are heavier than air and may spread along floors.
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.
In case of fire hazardous decomposition products may be produced such as:
Carbon oxides
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Keep people away from and upwind of spill/leak.
Ensure adequate ventilation.
Remove all sources of ignition.
Do not breathe vapours or spray mist.
- 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.
Do not allow run-off from fire fighting to enter drains or water courses.

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Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
Pick for disposal in tightly closed containers
Use explosion-proof equipment.
Ventilate the area.

7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Exhaust ventilation at the object is necessary.
Do not breathe vapours or spray mist.
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : The product is easily combustible.
Vapours may form explosive mixtures with air.
Flash back possible over considerable distance.
Use explosion-proof equipment.
Take precautionary measures against static discharges.
Keep product and empty container away from heat and sources of ignition.

Storage

Conditions for safe storage, including any incompatibilities : Store in area designed for storage of flammable liquids.
Protect from physical damage.
Keep containers tightly closed in a dry, cool and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Keep away from heat and sources of ignition.
Keep away from direct sunlight.
Store away from incompatible substances.
Container hazardous when empty.
Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Recommended storage temperature: 2 - 8 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

Appropriate engineering controls

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Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during and after use.

Individual protection measures, such as personal protective equipment

Respiratory protection	: In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection	: Solvent-resistant gloves Gloves must be inspected prior to use. Replace when worn.
Eye protection	: Safety goggles
Skin and body protection	: Wear suitable protective equipment. Wear as appropriate: Protective suit
Hygiene measures	: Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Keep working clothes separately. Recommended preventive skin protection Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid, clear
Colour	: colourless
Odour	: pungent
pH	: Note: no data available
Melting point/range	: Note: no data available
Boiling point/boiling range	: 82 °C

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Flash point	: 43 °F (6 °C)
Evaporation rate	: Note: no data available
Flammability	: Not applicable
Lower explosion limit	: 3 %(V)
Upper explosion limit	: 16 %(V)
Vapour pressure	: 97 hPa at 20 °C(68 °F)
Vapour density	: Note: no data available
Water solubility	: Note: soluble
Partition coefficient: n-octanol/water	: Note: no data available
Ignition temperature	: 524 °C
Decomposition temperature	: Note: No decomposition if used as directed.
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available

10. STABILITY AND REACTIVITY

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.

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Conditions to avoid	: Heat, flames and sparks. Keep away from direct sunlight.
Incompatible materials to avoid	: Acids Bases Oxidizing agents Reducing agents Sulfites Perchlorates
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: carbon oxides (CO, CO ₂).

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity Acetonitrile	: LD50: 617 mg/kg Species: Mouse, male and female Method: OECD Test Guideline 401
Pentanochlor	: LD50: 1,800 mg/kg Species: Mouse LD50: 5,100 mg/kg Species: Rat
Acute dermal toxicity Acetonitrile	: LD50: > 2,000 mg/kg Species: Rabbit
Skin irritation Acetonitrile	: Species: Rabbit Result: No skin irritation Method: OECD Test Guideline 404 Exposure time: 4 h
Eye irritation Acetonitrile	: Species: Rabbit Result: Irritating to eyes. Method: OECD Test Guideline 405

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**Sensitisation
Acetonitrile**

: Buehler Test
Species: Guinea pig
Result: Did not cause sensitisation on laboratory animals.
Method: OECD

Repeated dose toxicity

: Note: no data available

Genotoxicity in vitro

: Note: no data available

**Further information
Acetonitrile**

: STOT - single exposure:
The substance or mixture is classified as specific target organ
toxicant, single exposure, category 1.
May cause convulsions.
May cause neurotoxic effects.
Based on Human Evidence.

12. ECOLOGICAL INFORMATION**Toxicity****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

Persistence and degradability**Biodegradability**

: Note: Readily biodegradable.

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13. DISPOSAL CONSIDERATIONSWDPCCL Waste Disposal and : Specially Controlled Industrial Waste
Public Cleansing Law

Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION**ADR**UN/ID No. : UN 1648
Description of the goods : ACETONITRILE SOLUTION
Class : 3
Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3**IATA**UN/ID No. : UN 1648
Description of the goods : Acetonitrile solution
Class : 3
Packing group : II
Labels : 3
Packing instruction (cargo aircraft) : 364
Packing instruction : 353
(passenger aircraft)
Packing instruction : Y341
(passenger aircraft)**IMDG**UN/ID No. : UN 1648
Description of the goods : ACETONITRILE SOLUTION
Class : 3
Packing group : II
Labels : 3
EmS Number 1 : F-E
EmS Number 2 : S-D

Marine pollutant : no

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15. REGULATORY INFORMATION**National regulatory information**

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
JP VSL

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
JP AVL

Fire Service Law : Group 4 Flammable liquids
Type 1 petroleums
Hazardous rank II
Water soluble
Keep away from fire
Acetonitrile 75-05-8

Japan. SDS and Risk : Listed
Assessment Requirements Acetonitrile 75-05-8
(ISHL Art. 57-2 and 57-3,
Enforcement Order Art. 18-2,
Enforcement Rule Art. 34-2
and 34-2-2), as amended

Japan. ISHL Hazardous : Listed
Substances Subject to Acetonitrile 75-05-8
Labeling Requirements
(ISHL Enforcement Order,
Article 18, Art. 30 & 31), as
amended

Poisonous and Deleterious : Poisonous substance not for pharmaceutical use
Substances Control Law 32.3
Listed
Acetonitrile 75-05-8

Act on Confirmation, etc. of : Class I Designated Chemical Substances
Release Amounts of Specific 13
Chemical Substances in the Reportable quantity: 1 t
Environment and Promotion Concentration limits: 1 %
of Improvements to the
Management Thereof

Other international regulations

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Notification status

US. Toxic Substances
Control Act : Not On TSCA Inventory

Australia. Industrial Chemical
(Notification and
Assessment) Act : Not in compliance with the inventory

Canada. Canadian
Environmental Protection Act
(CEPA). Domestic
Substances List (DSL) : Not in compliance with the inventory

Japan. Kashin-Hou Law List : Not in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI) : Not in compliance with the inventory

Philippines. The Toxic
Substances and Hazardous
and Nuclear Waste Control
Act : Not in compliance with the inventory

China. Inventory of Existing
Chemical Substances : Not in compliance with the inventory

New Zealand. Inventory of
Chemicals (NZIoC), as
published by ERMA New
Zealand : Not in compliance with the inventory

16. OTHER INFORMATION**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

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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