

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/21/2014

Reviewed on 09/23/2014

## 1 Identification

- **Product identifier**
- **Trade name:** Petroleum Ether Reagent A.C.S, Boiling Range 35 - 60°C
- **Article number:** P1924
- **EC number:**  
232-453-7
- **Index number:**  
649-263-00-9
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Aqua Solutions, Inc.  
6913 Highway 225  
DEER PARK, TX 77536  
USA  
800-256-2586
- **Information department:**  
Technical Coordinator  
Sherman Nelson [sherman@aquasolutions.org](mailto:sherman@aquasolutions.org)  
Product safety department
- **Emergency telephone number:**  
Chemtrec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **Label elements**

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS02



GHS07



GHS08

- **Signal word** *Danger*

- **Hazard statements**

Highly flammable liquid and vapor.

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Causes skin irritation.  
 Suspected of damaging fertility or the unborn child.  
 May cause drowsiness or dizziness.  
 May cause damage to organs through prolonged or repeated exposure.  
 May be fatal if swallowed and enters airways.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
 Use explosion-proof electrical/ventilating/lighting/equipment.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 If swallowed: Immediately call a poison center/doctor.  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 Specific treatment (see on this label).  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2  
 Fire = 4  
 Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2  
 Fire = 4  
 Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

Petroleum Ether

· **Identification number(s)**

· **EC number:** 232-453-7

· **Index number:** 649-263-00-9

### 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult 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.

### 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.

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- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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 item 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.

## 7 Handling and storage

- **Precautions for safe handling** Open and handle receptacle with care.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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 item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**Petroleum Ether**

|     |   |
|-----|---|
| REL | Long-term value: 350 mg/m <sup>3</sup><br>Ceiling limit value: 1800* mg/m <sup>3</sup><br>*15-min |
|-----|---|

|     |                                     |
|-----|-------------------------------------|
| TLV | TLV Withdrawn - refer to Appendix H |
|-----|-------------------------------------|

- **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.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**

Safety glasses



Tightly sealed goggles

## 9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

|                         |                 |
|-------------------------|-----------------|
| <b>Form:</b>            | Liquid          |
| <b>Color:</b>           | Colorless       |
| <b>Odor:</b>            | Ether           |
| <b>Odour threshold:</b> | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

|                                     |                          |
|-------------------------------------|--------------------------|
| <b>Melting point/Melting range:</b> | 30 °C (86 °F)            |
| <b>Boiling point/Boiling range:</b> | 30 - 60 °C (86 - 140 °F) |

· **Flash point:** -49 °C (-56 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** 250 °C (482 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Not determined.

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

|               |           |
|---------------|-----------|
| <b>Lower:</b> | 0.6 Vol % |
| <b>Upper:</b> | 8 Vol %   |

· **Vapor pressure at 20 °C (68 °F):** 350 hPa (263 mm Hg)

· **Density at 20 °C (68 °F):** 0.653 g/cm<sup>3</sup> (5.449 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

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|   |  |
|---|--|
| · <b>Evaporation rate</b>   | Not determined.                            |
| · <b>Solubility in / Miscibility with Water at 20 °C (68 °F):</b> | ca.0.020 g/l                               |
| · <b>Partition coefficient (n-octanol/water):</b>                 | Not determined.                            |
| · <b>Viscosity:</b>   |  |
| <b>Dynamic:</b>   | Not determined.                            |
| <b>Kinematic:</b>   | Not determined.                            |
| · <b>Other information</b>  | No further relevant information available. |

## 10 Stability and reactivity

- **Reactivity**
- **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.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)** Substance is not listed.
- **NTP (National Toxicology Program)** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration)** Substance is not listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **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.

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## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |  |   |
|--|---|
| <b>· UN-Number</b>   | UN1268  |
| <b>· DOT, IMDG, IATA</b>   | UN1268  |
| <b>· UN proper shipping name</b>   | Petroleum distillates, n.o.s. (Petroleum Ether)   |
| <b>· DOT</b>   | PETROLEUM DISTILLATES, N.O.S. (Petroleum Ether)   |
| <b>· IMDG, IATA</b>  | PETROLEUM DISTILLATES, N.O.S. (Petroleum Ether)   |
| <b>· Transport hazard class(es)</b>  |   |
| <b>· DOT</b>   |   |
|  |   |
| <b>· Class</b>   | 3 Flammable liquids   |
| <b>· Label</b>   | 3   |
|  |   |
| <b>· IMDG, IATA</b>  |   |
|  |   |
| <b>· Class</b>   | 3 Flammable liquids   |
| <b>· Label</b>   | 3   |
| <b>· Packing group</b>   | II  |
| <b>· DOT, IMDG, IATA</b>   | II  |
| <b>· Environmental hazards:</b>  |   |
| <b>· Marine pollutant:</b>   | No  |
| <b>· Special precautions for user</b>  | Warning: Flammable liquids  |
| <b>· Danger code (Kemler):</b>   | 33  |
| <b>· EMS Number:</b>   | F-E,S-E   |
| <b>· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.   |
| <b>· Transport/Additional information:</b>                                       |   |
| <b>· DOT</b>   |   |
| <b>· Quantity limitations</b>  | On passenger aircraft/rail: 5 L<br>On cargo aircraft only: 60 L   |
|  |   |
| <b>· IMDG</b>  |   |
| <b>· Limited quantities (LQ)</b>   | 1L  |
| <b>· Excepted quantities (EQ)</b>  | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |

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· **UN "Model Regulation":** UN1268, Petroleum distillates, n.o.s. (Petroleum Ether), 3, II

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is not listed.
- **TSCA (Toxic Substances Control Act):** Substance is listed.
- **Proposition 65**
- **Chemicals known to cause cancer:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenic categories**
- **EPA (Environmental Protection Agency)** Substance is not listed.

· **TLV (Threshold Limit Value established by ACGIH)**

|                 |    |
|-----------------|----|
| Petroleum Ether | A3 |
|-----------------|----|

- **NIOSH-Ca (National Institute for Occupational Safety and Health)** Substance is not listed.
- **GHS label elements**  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS02

GHS07

GHS08

- **Signal word** *Danger*
- **Hazard statements**  
Highly flammable liquid and vapor.  
Causes skin irritation.  
Suspected of damaging fertility or the unborn child.  
May cause drowsiness or dizziness.  
May cause damage to organs through prolonged or repeated exposure.  
May be fatal if swallowed and enters airways.
- **Precautionary statements**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Use explosion-proof electrical/ventilating/lighting/equipment.  
Do not breathe dust/fume/gas/mist/vapors/spray.  
If swallowed: Immediately call a poison center/doctor.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
Specific treatment (see on this label).  
Store locked up.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **National regulations:**
- **Information about limitation of use:**  
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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## 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Department issuing SDS:** Environment protection department.

· **Contact:** Mr. Nelson

· **Date of preparation / last revision** 10/21/2014 / -

· **Abbreviations and acronyms:**

*ADR: Accord européen sur le transport 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*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*Flam. Liq. 2: Flammable liquids, Hazard Category 2*

*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2*

*Repr. 2: Reproductive toxicity, Hazard Category 2*

*STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*

*STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2*

*Asp. Tox. 1: Aspiration hazard, Hazard Category 1*

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