

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

## 1 Identification

- **Product identifier**
- **Trade name:** *n-Dodecane, Laboratory Grade*
- **Article number:** D7115
- **CAS Number:**  
112-40-3
- **EC number:**  
203-967-9
- **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 [shermann@aquasolutions.org](mailto:shermann@aquasolutions.org)
- **Emergency telephone number:**  
Chemtec: 800-424-9300  
Canutec: 613-996-6666



## 2 Hazard(s) identification

- **Classification of the substance or mixture**  
*Flammable Liquids 4 H227 Combustible liquid.*

---

- **Label elements**
- **GHS label elements** *The substance is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms** *Not Applicable*
- **Signal word** *Warning*
- **Hazard statements**  
*Combustible liquid.*
- **Precautionary statements**  
*Keep away from flames and hot surfaces. – No smoking.*  
*Wear protective gloves/protective clothing/eye protection/face protection.*  
*In case of fire: Use CO2, powder or water spray to extinguish.*  
*Store in a well-ventilated place. Keep cool.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

	Health = 1
	Fire = 2
	Reactivity = 0
- **HMIS-ratings (scale 0 - 4)**

<table border="1" style="background-color: #0000FF; color: white; padding: 2px;"><tr><td>HEALTH</td><td style="text-align: center;">1</td></tr></table>	HEALTH	1	Health = 1
HEALTH	1		
<table border="1" style="background-color: #FF0000; color: white; padding: 2px;"><tr><td>FIRE</td><td style="text-align: center;">2</td></tr></table>	FIRE	2	Fire = 2
FIRE	2		
<table border="1" style="background-color: #FFFF00; padding: 2px;"><tr><td>REACTIVITY</td><td style="text-align: center;">0</td></tr></table>	REACTIVITY	0	Reactivity = 0
REACTIVITY	0		
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*

(Contd. on page 2)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

**Trade name: n-Dodecane, Laboratory Grade**

(Contd. of page 1)

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**  
CAS: 112-40-3 dodecane
- **Identification number(s)**
- **EC number:** 203-967-9

### 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.
- **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.

### 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.
- **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).
- **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:** 1.7 ppm
- **PAC-2:** 1.3 ppm
- **PAC-3:** 7.9 ppm

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.

(Contd. on page 3)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

Trade name: *n-Dodecane, Laboratory Grade*

(Contd. of page 2)

- **Information about protection against explosions and fires:** *No special measures required.*
- **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 section 7.*
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:** *Not required.*
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** *Wash hands before breaks and at the end of work.*
- **Breathing equipment:** *Not required.*
- **Protection of hands:**  
*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:** *Goggles recommended during refilling.*
- **Body protection:** *Protective work clothing*

### 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>	Petrol-like
<b>Odor threshold:</b>	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

<b>Melting point/Melting range:</b>	-12 °C (10.4 °F)
<b>Boiling point/Boiling range:</b>	216 °C (420.8 °F)

- **Flash point:** 71 °C (159.8 °F)

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

(Contd. on page 4)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

Trade name: *n*-Dodecane, Laboratory Grade

(Contd. of page 3)

· <b>Auto igniting:</b>	200 °C (392 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Not determined.
· <b>Danger of explosion:</b>	Not determined.
· <b>Explosion limits:</b>	
<b>Lower:</b>	0.6 Vol %
<b>Upper:</b>	40 Vol %
· <b>Vapor pressure at 48 °C (118.4 °F):</b>	1.3 hPa (1 mm Hg)
· <b>Density at 20 °C (68 °F):</b>	0.75 g/cm <sup>3</sup> (6.25875 lbs/gal)
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <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** 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.
- **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.

US

(Contd. on page 5)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

Trade name: *n-Dodecane, Laboratory Grade*

(Contd. of page 4)

## 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 1 (Assessment by list): slightly hazardous for water*  
*Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.*
- **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.*
- **Uncleaned packagings:**
- **Recommendation:** *Disposal must be made according to official regulations.*

## 14 Transport information

· <b>UN-Number</b>	
· <b>DOT, ADN, IMDG, IATA</b>	<i>Not regulated</i>
· <b>UN proper shipping name</b>	
· <b>DOT, ADN, IMDG, IATA</b>	<i>Not regulated</i>
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADN, IMDG, IATA</b>	
· <b>Class</b>	<i>Not regulated</i>
· <b>Packing group</b>	
· <b>DOT, IMDG, IATA</b>	<i>Not regulated</i>
· <b>Environmental hazards:</b>	
· <b>Marine pollutant:</b>	<i>No</i>
· <b>Special precautions for user</b>	<i>Not applicable.</i>
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	<i>Not applicable.</i>
· <b>UN "Model Regulation":</b>	<i>Not regulated</i>

US  
(Contd. on page 6)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 07/19/2024

Reviewed on 07/19/2024

Trade name: n-Dodecane, Laboratory Grade

(Contd. of page 5)

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **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):** ACTIVE
- **Hazardous Air Pollutants** Substance is not 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)** Substance is not listed.
- **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** Not Applicable
- **Signal word** Warning
- **Hazard statements**  
Combustible liquid.
- **Precautionary statements**  
Keep away from flames and hot surfaces. – No smoking.  
Wear protective gloves/protective clothing/eye protection/face protection.  
In case of fire: Use CO<sub>2</sub>, powder or water spray to extinguish.  
Store in a well-ventilated place. Keep cool.  
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 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:**  
Date of Preparation / Last Revision:
- **Date of preparation / last revision**  
Revision 1.2 07/18/2024: Reviewed SDS for accuracy. MH/STN  
Revision 0.0, 06-07-2019: Creation date for SDS. STN  
07/19/2024 / -
- **Abbreviations and acronyms:**  
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  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
NFPA: National Fire Protection Association (USA)  
HMIS: Hazardous Materials Identification System (USA)  
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

(Contd. on page 7)

US

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

Printing date 07/19/2024

Reviewed on 07/19/2024

**Trade name: n-Dodecane, Laboratory Grade**

(Contd. of page 6)

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Flammable Liquids 4: Flammable liquids – Category 4*

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

US