

Printing date 09/04/2014

Safety Data Sheet acc. to OSHA HCS

Reviewed on 09/04/2014

1 Identification

- · Product identifier
- · Trade name: n-Decane 95%
- Article number: 205084
- · CAS Number:
- 124-18-5

• *Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.*

- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Haltermann GmbH Schlengendeich 17 D-21107 Hamburg, Germany Tel.: +49-(0)40-33318-0 E-mail: Info-haltermann@h-c-s-group.com

· Information department: Product stewardship

• Emergency telephone number: TUIS: +49 (0)69-305 6418

2 Hazard(s) identification

- \cdot Classification of the substance or mixture
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC
- Harmful

Harmful: may cause lung damage if swallowed.

Flammable. Repeated exposure may cause skin dryness or cracking.

· Information concerning particular hazards for human and environment:

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

· Label elements

• Labelling according to EU guidelines: The product has been classified and marked in accordance with directives on hazardous materials.

· Code letter and hazard designation of product:



Harmful

· Risk phrases:

Flammable. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking

· Safety phrases:

Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. This material and its container must be disposed of as hazardous waste. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

- Classification system:
- \cdot NFPA ratings (scale 0 4)



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· HMIS-ratings (scale 0 - 4)

HEALTH • Health = 02 FIRE

Fire = 2**REACTIVITY O** 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
- 124-18-5 decane

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: Do not induce vomiting; immediately call for medical help.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Danger Aspiration hazard
- · Indication of any immediate medical attention and special treatment needed
- No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 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 Wear protective equipment. Keep unprotected persons away.
- Environmental precautions: No special measures required.
- 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.

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See Section 13 for disposal information.

7 Handling and storage

· Precautions for safe handling Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols. · Information about protection against explosions and fires: Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

· 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: Keep receptacle tightly sealed.
- 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: 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:
- *Keep lamps filled with this liquid out of the reach of children.*
- Just a sip of lamp oil or even sucking the wick of lamps may lead to life-threatening lung damage.

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Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

• Breathing equipment:

Ensure good ventilation. This can be achieved by using a local exhaustion or general exhaust system. If these measures are insufficient to keep the solvent vapour concentration below the workplace limit, wear an adequate respiratory protective device.

Short term filter device:

· Protection of hands:

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

Nitrile rubber, NBR

> 0,38 mm

- Penetration time of glove material > 480 min (EN 374)
- Eye protection: Tightly sealed goggles

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| Information on basic physics General Information | al and chemical properties |
|---|--|
| · Appearance: | |
| Form: | Fluid |
| Color: | Colorless |
| · Odor: | Characteristic |
| · Change in condition Melting point/Melting ran | ge: -29.7 °C (-21 °F) |
| Boiling point/Boiling rang | e: 170 °C (338 °F) |
| · Flash point: | 49 °C (120 °F) |
| · Ignition temperature: | 205 °C (401 °F) |
| Danger of explosion: | Product is not explosive. However, formation of explosive air/vapor mixture. are possible. |
| · Explosion limits: | |
| Lower: | 0.7 Vol % |
| Upper: | 5.4 Vol % |
| • Density at 15 °C (59 °F): | 0.734 g/cm3 |
| · Solubility in / Miscibility wit | h |
| Water: | Not miscible or difficult to mix. |
| • Other information | 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:

· LD/LC50 values that are relevant for classification:

Inhalative LC50 /4 h 72.3 mg/L (mus)

124-18-5 decane

| Oral | LD50 | > 5000 mg/kg (rat) (OECD 401) |
|---------------------------|------|----------------------------------|
| Dermal | LD50 | > 5000 mg/kg (rabbit) (OECD 402) |
| · Primary irritant effect | | |

• **Primary irritant effect:** • **on the skin:** No irritant effect.

• on the eye: No irritating effect.

• Sensitization: No sensitizing effects known.

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· 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 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 · UN-Number · DOT, ADR, IMDG, IATA UN2247 · UN proper shipping name $\cdot DO\bar{T}$ N-Decane · ADR 2247 n-Decane N-DECANE · IMDG, IATA · Transport hazard class(es) $\cdot DOT$ · Class 3 Flammable liquids (Contd. on page 6) USA



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| | (Contd. of pag |
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| Label | 3 |
| ADR | |
| | |
| | |
| 3 | |
| Class | 3 (F1) Flammable liquids |
| Label | 3 |
| IMDG, IATA | |
| | |
| | |
| 3 | |
| Class | 3 Flammable liquids |
| Label | 3 |
| Packing group | |
| DOT, ADR, IMDG, IATA | 111 |
| Environmental hazards: | |
| Marine pollutant: | No |
| Special precautions for user | Warning: Flammable liquids |
| Danger code (Kemler): | <i>30</i> |
| EMS Number: | F-E,S-E |
| Transport in bulk according to Anne MARPOL73/78 and the IBC Code | x II of Not applicable. |
| | Noi applicable. |
| Transport/Additional information: | |
| DOT | |
| Quantity limitations | On passenger aircraft/rail: 60 L On cargo aircraft only: 220 L |
| ADR | |
| Excepted quantities (EQ) | Code: El |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| IMDG | |
| Limited quantities (LQ) | 5L |
| Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per inner packaging: 50 mi Maximum net quantity per outer packaging: 1000 ml |

15 Regulatory information

*

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

• Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

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|---|------------------------|
| 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. | |
| Cancerogenity categories | |
| EPA (Environmental Protection Agency) | |
| Substance is not listed. | |
| TLV (Threshold Limit Value established by ACGIH) | |
| Substance is not listed. | |
| NIOSH-Ca (National Institute for Occupational Safety and Health) | |
| Substance is not listed. | |
| Product related hazard informations: The product has been classified and marked in accordance with directives o | m hazardous materials. |
| Hazard symbols: | |
| Harmful | |

Flammable. Harmful: may cause lung damage if swallowed. Repeated exposure may cause skin dryness or cracking

· Safety phrases:

Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. This material and its container must be disposed of as hazardous waste. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label • **Chemical safety assessment:** A Chemical Safety Assessment has 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.

· Date of preparation / last revision 09/04/2014 / 8

 \cdot * Data compared to the previous version altered.