WF Education Group - Safety Data Sheet

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021 07 June 2021

Date printed:

Section 1. Identification

Product Identifier HE2998

> Product Name n-HEXANE pure 500ml.

CAS Number 110-54-3

REACH Registration No 01-2119480412-44-XXXX

CH (CH) CH =86.18 Molecular Formula

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 **Supplier** WF Education Group

ICKERS

Phoenix House

Battlefield Enterprise Park

Stafford Drive Shrewsbury Shropshire SY1 3FE

UNITED KINGDOM

Phone +44(0)1743 812200 Email sales@wf-education.com Website www.timstar.co.uk

Emergency Telephone (08:30-17:00) +44(0)1743 812200

(24hr)

(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Flammable liquid, category 2 H225: Highly flammable liquid and vapour.

Skin corrosion/irritation, category 2 H315: Causes skin irritation.

Reproductive toxicity, category 2 H361: Suspected of damaging fertility or the unborn child.

Spec target organ tox - single, category 3 H336: May cause drowsiness or dizziness.

Spec target organ tox - repeat, category 2 H373: May cause damage to organs through prolonged or repeated exposure.

> H304: May be fatal if swallowed and enters airways. H411: Toxic to aquatic life with long lasting effects.

Aspiration hazard, category 1

Hazard to aquatic environment, category 2

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms









Hazard Statements Highly flammable liquid and vapour. Suspected of damaging fertility or the unborn child. May be fatal if

swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure. Causes skin

irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

Keep container tightly closed. Wear protective gloves / protective clothing / eye protection / face protection. **Precautionary Statements**

Avoid breathing dust / fume / gas / mist / vapours / spray. IF SWALLOWED: Immediately call a POISON

CENTER or doctor/physician. Do NOT induce vomiting.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
n-Hexane	110-54-3	203-777-6	01-2119480412-44-XXXX	>95%	Flam. Liq. 2,Skin Irrit. 2,Repr. 2,STOT SE 3 (D),STOT RE 2,Asp. Tox. 1,Aquatic Chronic 2

Section 4. First Aid

4.1 Description of first aid measures

Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION. Eyes

Skin Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-

use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.

Inhalation Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If

breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery

position. OBTAIN MEDICAL ATTENTION URGENTLY.

Ingestion If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen

if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.

Personal protection for first Wear protective gloves / eye protection.

aiders

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media Foam, dry powder, carbon dioxide or vaporising liquids. Use water spray to keep fire exposed containers cool.

Unsuitable Media Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards Vapour-air mixtures are explosive.

5.3 Advice for firefighters

Advice for firefighters Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear

protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate

area immediately. Do not allow general use of area until it is safe to do so. Beware: vapour is heavier than air and

will tend to accumulate at low spots.

6.2 Environmental precautions

Environmental Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local

Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with

copious amounts of water.

Minor Spillage Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in

remote area, then dispose of absorbent as solid chemical waste. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage. Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use. Keep well separated from oxidising agents. Large quantities must be stored in accordance with the Petroleum Spirits Act.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits				
			Long Term (8hr TWA)		Short Term 15min period)		
n-Hexane	110-54-3	>95%	20.0 ppm	72.0 mg/m-3	-	-	

Exposure data source(s) IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

maintained chemical cartridge organic vapour respirator, or use self contained breathing apparatus.

Hand Protection Use solvent resistant gloves.

Eye Protection Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance Clear colourless liquid.
Odour Characteristic.
pH Not applicable

Boiling Point 69°C

Melting Point -95.6°C

Flash Point -22°C (Closed cup)

Upper Flammable Limit 7.5% Lower Flammable Limit 1.2% Auto Ignition 223°C

Explosive Properties Severe in confined spaces.

Oxidising Properties No.

Vapour Pressure 100mmHg @ 20°C

Relative Density 0.6600

Water Solubility Insoluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1 Reactivity No data available.

10.2 Chemical Stability Stable under normal conditions

10.3 Possibility of hazardous

reactions

No data available.

10.4 Conditions to Avoid

Hot surfaces, naked flames or other sources of ignition.

10.5 Incompatable Materials

Strong oxidising agents.

10.6 Hazardous Decomposition

None unusual. Burning will produce smoke, carbon monoxide and/or carbon dioxide.

Products

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes Both the vapour and liquid will, act as an eye irritant.

Skin The liquid is mildly irritating to the skin. Repeated or prolonged contact may defat the skin producing irritation

and dermatitis.

LD50 Skin 3,000mg/kg Rabbit

Ingestion Ingestion will cause irritation of the throat with nausea and vomiting, unconsciousness may develop in extreme

cases. May be fatal if swallowed and enters airways.

LD50 Oral 15,840mg/kg Rat

Inhalation Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and

respiratory tract. High concentrations of vapour may cause narcosis. Symptoms include drowsiness, mental confusion and unconsciousness. Chronic exposure can lead to loss of sensation in hands and feet and has been linked with neurotoxic effects, progressing for several months following exposure, followed by slow recovery.

LD50 Inhalation 48000ppm Rat (4 hours)

TCLo Not available

Carcinogenicity No information is available.

Mutagenicity May be a mutagen.

Reproductive Effects Suspected of damaging fertility or the unborn child.

Section 12. Ecological

12.1 Toxicity Moderately toxic to mammals, fish and bacteria. Toxic to aquatic organisms and may cause long term adverse

effects in the aquatic environment.

LC50 Algal Not available
LC50 Crustacea Not available

LC50 Fish 2.5mg/l Fathead Minnow (96 hours)

12.2 Persistence and No data available.

degradability

12.3 Bioaccumulative potential No data available.12.4 Mobility in soil No data available.

WF Education Group - Safety Data Sheet

Ref: HE2998

Page 4 of 6

12.5 Results of PBT & vPvB

assessment

Assessment not required.

12.6 Other adverse effects

None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of

into water courses or sewerage systems due to high risk of explosion.

Contaminated Packaging Use a licensed waste disposer. Do not attempt to burn any residual liquids due to risk of explosion.

Section 14. Transport Information

14.1 UN Number 1208 14.2 Proper Shipping Name Hexanes

14.3 Transport classes

UN classification 3 Subsidiary hazard(s) None Transport category 2 ADR Hazard ID 33 Tunnel Restriction Code D/E

14.4 Packing Group

See section 12. 14.5 Environment hazards

14.6 Special precautions for

No special precautions required.

14.7 Transport in bulk Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Flammable liquid, category 2; Skin corrosion/irritation, category 2; Reproductive toxicity, category 2; Spec target

organ tox - single, category 3; Spec target organ tox - repeat, category 2; Aspiration hazard, category 1; Hazard to

aquatic environment, category 2

Signal word Danger

Hazard Pictograms









Hazard Statements H225, H361, H304, H373, H315, H336, H411

Highly flammable liquid and vapour. Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure. Causes skin

irritation. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.

Hazard Statements (Packs of 100ml/g or less)

H225, H301, H304, H373

Highly flammable liquid and vapour. Toxic if swallowed. May be fatal if swallowed and enters airways. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statements P233, P280, P261, P301+P310, P331

> Keep container tightly closed. Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

P301+P310

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

Revision number: 1.1 (Supercedes revision 1.0)

Revision date: 16 April 2021

Reviewed by chemist: 16 April 2021

Printed date: 07 June 2021

Copyright: 2021 WF Education Group