

MATERIAL SAFETY DATA SHEET



GC Linearity & Precision Standards

SECTION 1 – MANUFACTURER DATA

Manufacturer's name: NLG Analytical Ltd
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Alexandria Way
Congleton Business Park
Cheshire UK

Emergency telephone no. 44+ 1260 274 266

SECTION 2 – CHEMICAL IDENTITY INFORMATION/HAZARDOUS INGREDIENTS

Chemical name	Cas#	OSHA PEL/TWA	ACGIH TLV/TWA	NIOSH TLV/TWA	%WEIGHT WEIGHT
n-Tetradecane	629-59-4	ND	ND	ND	%
n-Hexadecane	544-76-3	ND	ND	ND	%
n-Hexane	110-54-3	50ppm	50ppm	100ppm	%

Chemical Family: Aliphatic Hydrocarbons

Standard	Conc. in hexane % w/v	
	n-tetradecane	n-hexadecane
GC Linearity & Precision Standard 1	0.000%	0.025%
GC Linearity & Precision Standard 2	0.002%	0.025%
GC Linearity & Precision Standard 3	0.010%	0.025%
GC Linearity & Precision Standard 4	0.040%	0.025%
GC Linearity & Precision Standard 5	0.080%	0.025%
GC Linearity & Precision Standard 6	0.120%	0.025%
GC Linearity & Precision Standard 7	0.160%	0.025%

Disclaimer: This material Safety Data Sheet is offered without charge to the clients of NLG Analytical. Data is the most current available to NLG Analytical at the time of preparation and is issued as a matter of information only, no warranty as to its accuracy or completeness is expressed or implied.

SECTION 3 – PHYSICAL / CHEMICAL DATA

Specific Gravity (H₂O =1): 0.659
Melting Point (degree C): -95
Evaporation Rate (n-butyl acetate =1): >1
Boiling Point (Degree C): 68.7
Vapour pressure (mm Hg): 124 at 20 degrees C
Vapour density (Air =1): 3.0
Solubility in water: Insoluble (x) / soluble ()
Appearance and odour: colourless liquid with a mild gasoline –like odour.

SECTION 4 – FIRE / EXPLOSION DATA

Flash point (Method Used): -21.7 degrees C (closed cup) n- Hexane
Flammable Limits: LEL (1.1% / UEL (7.5%)

Extinguishing Media: Carbon dioxide, dry chemical powder of foam.

Special Fire Fighting Procedures: Wear full protective clothing and self contained positive pressure breathing apparatus certified by NIOSH, when fighting chemically related fires.

Unusual Fire and Explosion Hazards: Volatile and highly flammable.

Vapour may travel considerable distance to source of ignition and flash back. Container explosion may occur under fire conditions.

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SECTION 5 – REACTIVITY DATA

Stability: Stable (x) / unstable 9 0
Conditions to avoid: Heat sparks, open flame, open containers and poor ventilation.

Incompatibility (Materials to Avoid): Oxidizing agents.
Hazardous decomposition or by-products: Incomplete combustion may generate carbon monoxide and other toxic materials.

Hazardous Polymerisation: May occur () / will not occur (x)

SECTION 6 – HEALTH HAZARD /EMERGENCY FIRST AID

Route (s) of Entry: Inhalation? **YES** Skin ? **Yes** Ingestion ? **YES**

Inhalation: Harmful if inhaled. Vapour or mist is irritating to the mucous membranes and upper respiratory tract. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. If inhaled remove to fresh air. If breathing is difficult give oxygen. Contact Physician.

Eye Contact: Vapour or mist is irritating to the eyes. Contamination of the eyes should be treated by immediate and prolonged irrigation with copious amounts of water by separating the eyelids with fingers. Contact physician.

Skin Contact: Causes skin irritation. In case of contact, immediately wash skin with soap and copious amounts of water. Remove and wash contaminated clothing promptly.

Ingestion: Harmful if swallowed. If ingested, wash out mouth with water. Call " Poison Control Centre" for assistance. Contact Physician immediately.

Health Hazard Acute/Chronic: This chemical is an eye and mucous membrane irritant and central nervous system depressant. An acute exposure causes Irritation, gastrointestinal tract discomfort and narcosis.

Carcinogenicity : NTP? **No** IARC Monographs? **NO** OSHA Regulated? **YES**

Medical Conditions generally aggravated by exposure: Preclude from Exposure those individuals susceptible to dermatitis.

SECTION 7 – SPILL / DISPOSAL DATA

Spill control: Shut off all sources of ignition. Wear full protective clothing and self contained positive pressure breathing apparatus certified by NIOSH. Absorb spilled chemical in an absorbent recommended for solvent spills of this type and remove to a safe location for disposal.

Waste disposal: Burn in a chemical incinerator equipped with an afterburner and scrubber.

SECTION 8 – Safety Measures / equipment

Ventilation: Adequate ventilation is required to protect personnel from exposure to chemical vapours exceeding PEL to minimize fire hazards.

Respiratory: Use NIOSH approved respirator equipment.

Eyes: Safety glasses are considered minimum protection. Chemical safety goggles or face shield may be necessary depending on quantity of material and conditions of use. Emergency eye wash fountains should be available in the vicinity of any possible exposure.

Skin: Chemical- resistant protective gloves and clothing are recommended. The choice of protective gloves or clothing must be based on chemical resistance and other user requirements. Generally, BUNA-N offers acceptable chemical resistance. Individuals who are acutely specifically sensitive to this chemical may require additional protective clothing.

Storage: Store in a cool dry place. Keep away from heat, sparks open flame and oxidizing agents. Proper storage must be determined based on other materials stored and their hazards and potential chemical in compatibility. Store in an acceptable protect and secure flammable liquid storage cabinet or room.

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SECTION 9 – SPECIAL PRECAUTIONS

Unless otherwise noted, the above information pertains only to the solvent and similar types of components in the sample.

When no toxicity data is provided it is prudent to handle this chemical as hazardous. Furthermore, since individual chemical hypersensitivity cannot be predicted, every chemical should be handled with due respect.

SECTION 10 – GENERAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibilities of such damages.