

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name N1.0

Contains Decane, 5-Methylnonane, 3-Methylnonane

Contains Decane, 5-Methylnonane, 3-Methylnonane

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Viscometer and/or density measurement equipment calibration and performance verification reference standard

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

Cannon Instrument Company

2139 High Tech Rd.

State College, PA 16803-1733

TEL: (814) 353-8000; (800) 676-6232

For further information, please contact

E-mail Address No information available.

1.4. Emergency telephone number

Emergency Telephone Number (800) 255-3924 Domestic CHEM-TEL Inc.
+1 (813) 248-0585 Overseas CHEM-TEL Inc. (Please Call Collect)

Europe	112
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Section 2. Hazards identification

2.1. - Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Aspiration Toxicity	Category 1
Acute Inhalation Toxicity - Vapors	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific Target Organ Systemic Toxicity (Single Exposure)	Category 3

Physical Hazards

Flammable liquids	Category 3
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2.2. Label Elements



Signal Word

Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

H226 - Flammable liquid and vapor

Precautionary Statements - EU (§28, 1272/2008)

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P370 + P378 - In case of fire: Use CO₂, dry chemical, or foam for extinction.

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician

P331 - Do NOT induce vomiting

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other information

Prolonged skin contact may defat the skin and produce dermatitis. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Section 3. Composition/information on ingredients

3.1. Substances**3.2. Mixtures**

Chemical Name	EC-No	CAS-No	Weight %	EU - GHS Substance Classification	REACH No.
Decane	204-686-4	124-18-5	>94.5	STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H332) Flam Liq. 3 (H226)	No data available
3-Methylnonane	227-631-6	5911-04-6	<5	STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315)	No data available
5-Methylnonane	-	15869-85-9	<5	STOT SE 3 (H336) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315)	No data available

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First aid measures

4.1. Description of first-aid measures

Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Obtain medical attention if irritation persists.
Skin Contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Ingestion	Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. Drink plenty of water. Get medical attention.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur. Artificial respiration and/or oxygen may be necessary. If breathing has stopped, contact emergency medical services immediately.

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

Most Important Symptoms/Effects Drowsiness. Dizziness. Irritation. Difficulty in breathing. Coughing and/ or wheezing. Nausea. Tremors. Headaches. Neurological disorders.

4.3. Indication of immediate medical attention and special treatment needed

Notes to Physician Aspiration hazard.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Foam. Dry powder.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide, Carbon dioxide.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Avoid contact with skin, eyes and clothing. Use personal protective equipment.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Dike to collect large liquid spills. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Clean contaminated surface thoroughly.

6.4. Reference to other sections

See Section 12 for additional information.

Section 7. Handling and storage

7.1. Precautions for Safe Handling

Handling

Keep away from open flames, hot surfaces and sources of ignition. Avoid contact with skin, eyes and clothing. Wear personal protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

7.3. Specific end use(s)

Exposure Scenario

No information available.

Other Guidelines

No information available.

Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical Name	EU	Austria	Belgium	Cyprus	Denmark
Decane 124-18-5					TWA: 45 ppm TWA: 250 mg/m ³
Chemical Name	Finland	France	Germany	Gibraltar	Greece
Decane 124-18-5		TWA: 1000 mg/m ³ STEL: 1500 mg/m ³			
3-Methylnonane 5911-04-6		TWA: 1000 mg/m ³ STEL: 1500 mg/m ³			
5-Methylnonane 15869-85-9		TWA: 1000 mg/m ³ STEL: 1500 mg/m ³			
Chemical Name	The Netherlands	Norway	Poland	Portugal	Spain
Decane 124-18-5		TWA: 40 ppm TWA: 275 mg/m ³ STEL: 40 ppm STEL: 275 mg/m ³			
3-Methylnonane 5911-04-6		TWA: 40 ppm TWA: 275 mg/m ³ STEL: 40 ppm STEL: 275 mg/m ³			
5-Methylnonane 15869-85-9		TWA: 40 ppm TWA: 275 mg/m ³ STEL: 40 ppm STEL: 275 mg/m ³			

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level No information available.

Predicted No Effect Concentration (PNEC) No information available.

8.2. Exposure controls

Engineering Measures	Ensure adequate ventilation, especially in confined areas.
Personal protective equipment	Personal protection equipment should be chosen according to the CEN standards
Eye Protection	Safety glasses with side-shields. If splashes are likely to occur, wear: Goggles.
Skin and Body Protection	Wear fire/flame resistant/retardant clothing.
Hand Protection	Impervious gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
Environmental Exposure Controls	No information available.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid	Appearance	Colorless
Odor	Hydrocarbon-like		

<u>Property</u>	<u>Values</u>	<u>Remarks/ - Method</u>
pH	No data available	None known
Melting Point/Range	No data available	None known
Boiling Point/Boiling Range	171 °C	None known
Flash Point	44 °C	Closed cup
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limits in Air	No data available	None known
Vapor Pressure	No data available.	None known
Vapor Density	No data available.	None known
Relative Density	No data available 0.73	None known
Water Solubility	Insoluble in water.	None known
Solubility in other solvents	Soluble in solvents.	None known
Partition coefficient: n-octanol/water	No data available	None known
Autoignition Temperature	No data available	None known
Decomposition Temperature	No data available	None known
Viscosity	1 cSt @ 40°C	None known
Explosive Properties	No information available	
Oxidizing Properties	No information available	

9.2. Other information

VOC Content (%)	No information available
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Section 10. Stability and reactivity

10.1. Reactivity

Not reactive under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Ignitions sources - heat, sparks and open flames.

10.5. Incompatible materials

Strong acids. Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11. Toxicological information

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Inhalation

Harmful by inhalation. May cause irritation of respiratory tract. May cause central nervous system depression with nausea, headache, dizziness, vomiting, and incoordination.

Eye Contact

Expected to be an irritant based on components.

Skin Contact

Expected to be an irritant based on components. Prolonged skin contact may defat the skin and produce dermatitis.

Ingestion

Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. May cause central nervous system depression. May be fatal if swallowed and enters airways.

Acute Toxicity

5.5% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

LD50 Oral	99,999.00 mg/kg
LD50 Dermal	99,999.00 mg/kg
Gas	99,999.00 mg/L
Dust/Mist	1.60 mg/L
Vapor	12.00 mg/L

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Decane	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	> 1369 ppm (Rat) 8 h

Sensitization

No information available.

Mutagenic Effects

No information available.

Carcinogenic Effects

No information available.

Reproductive Toxicity

No information available.

Developmental Toxicity

No information available.

STOT - single exposure

May cause drowsiness or dizziness

STOT - repeated exposure

See listed target organs below.

Target Organ Effects

Central nervous system (CNS). Liver. Kidney. Respiratory system. Cardiovascular system.

Neurological Effects

Repeated or prolonged overexposure to solvents may cause permanent damage to the nervous system. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

Aspiration Hazard

May be fatal if swallowed and enters airways.

Section 12. Ecological information

12.1. Toxicity

Ecotoxicity Effects

Harmful to aquatic organisms.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Decane	EC50 24 h: = 0.043 mg/L (Chlorella vulgaris)			EC50 48 h: = 18 mg/L (Daphnia magna)

12.2. Persistence and degradability

Expected to be biodegradable

12.3. Bioaccumulative potential

Chemical Name	Log Pow
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Decane	5.1
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12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

This product does not contain any known or suspected endocrine disruptors.

Section 13. Disposal considerations

13.1. Waste treatment methods**Waste from Residues / Unused Products**

Dispose of in accordance with local regulations.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport information

Note:

The information provided below may not apply to all shipping situations. Consult appropriate Dangerous Goods Regulations for additional requirements and mode-specific, material-specific, or quantity-specific shipping requirements.

IMDG/IMO

14.1. UN-Number	UN2247
14.2. Proper Shipping Name	n-Decane
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN2247, n-Decane, 3, III, (44°C c.c.)
14.5. Marine Pollutant	None
14.6. Special Provisions	None
EmS No.	F-E, S-E
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available.

RID

14.1. UN-Number	UN2247
14.2. Proper Shipping Name	n-Decane
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN2247, n-Decane, 3, III
14.5. Environmental hazard	None
14.6. Special Provisions	None
Classification Code	F1

ADR

14.1. UN-Number	UN2247
14.2. Proper Shipping Name	n-Decane
14.3. Hazard Class	3
ADR/RID-Labels	3
14.4. Packing Group	III
Description	UN2247, n-Decane, 3, III, (D/E)
14.5. Environmental hazard	None
14.6. Special Provisions	None

Classification Code	F1
ICAO	
14.1. UN-Number	UN2247
14.2. Proper shipping name	n-Decane
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN2247, n-Decane, 3, III
14.5. Environmental hazard	None
14.6. Special Provisions	None
IATA	
14.1. UN-Number	UN2247
14.2. Proper Shipping Name	n-Decane
14.3. Hazard Class	3
14.4. Packing Group	III
Description	UN2247, n-Decane, 3, III
14.5. Environmental hazard	None
14.6. Special Provisions	None
ERG Code	3L

Section 15. Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

TSCA	Not determined
EINECS/ELINCS	Not determined
DSL/NDSL	Complies
PICCS	Not determined
ENCS	Complies
IECSC	Not determined
AICS	Not determined
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16. Other information

Full text of H-Statements referred to under sections 2 and 3

H336 - May cause drowsiness or dizziness
H304 - May be fatal if swallowed and enters airways
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H226 - Flammable liquid and vapor

Key literature references and sources for data

www.ChemADVISOR.com/

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Revision Note (M)SDS sections updated: 3, 8.

This safety data sheet complies with the requirements of Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No. 1907/2006

General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet