



TRIANGLE SOLVENTS

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SAFETY DATA SHEET

TRADE NAME: **PARAFFIN**

SYNONYM: **C9-C11 n-PARAFFIN**

COMMON NAME: **ODOURLESS KEROSENE**



Material Safety Data Sheet

C9-C11 n-Paraffin

1 Chemical product and company identification

Common name	: C9-C11 n-Paraffin	Code	: 1443
Supplier	: Sasol Wax P.O. Box 1 Sasolburg 1947 Republic of South Africa TEL: +27 16 960 3002	MSDS#	:
Synonym	: Kersol 150/200 (Sasolchem), Hydrocarbon blend C9-C11, Solvent C9-C11, Normal alkane C9-C11	Validation date	: 11/21/2003.
Trade name	: C9-C11 n-Paraffin	Print date	: 11/21/2003.
Material uses	: Paints and coatings; detergents; adhesives; aerosols; lacquers; carrier for insecticides; polishes; catalyst carrier.	Prepared by	: Aneshia Ambaram
Manufacturer	: Sasol Chemical Industries P.O. Box 1 Sasolburg 1947 Republic of South Africa TEL: +27 16 960-9111	In case of emergency	: SOUTH AFRICA: 0800 11 28 90 INTERNATIONAL: +27 17 610 4444

2 Composition / information on ingredients

Name	CAS #	% by weight	Exposure limits
Hydrocarbon blend, may contain:			
Nonane	111-84-2	30-50	ACGIH TLV (United States, 2003) TWA: 200 ppm 8 hour(s).
Decane	124-18-5	30-50	AIHA WEEL (United States) TWA: 45 ppm 8 hour(s). TWA: 250 mg/m ³ 8 hour(s).
Undecane	1120-21-4	20-30	Not available.
Octane	111-65-9	5	ACGIH TLV (United States, 2002) TWA: 300 ppm 8 hour(s). TWA: 1401 mg/m ³ 8 hour(s). OSHA PEL Z1 (United States, 2002). : 500 ppm : 2350 mg/m ³
Dodecane	112-40-3	1	Not available.

3 Hazards identification

Physical state and appearance : Clear liquid.

Emergency overview : WARNING!

FLAMMABLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FLASH FIRE.
HARMFUL, MAY CAUSE LUNG DAMAGE IF SWALLOWED.
VAPORS MAY CAUSE DROWSINESS AND DIZZINESS.
REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS AND CRACKING.
TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS.

Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. If swallowed, seek medical advice immediately and show this container or label.

Routes of entry : Absorbed through skin. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes : Hazardous in case of eye contact.

Skin : Repeated exposure may cause skin dryness or cracking.

Inhalation : Vapors may cause drowsiness and dizziness.

Ingestion : Harmful if swallowed. Aspiration hazard if swallowed- can enter lungs and cause damage.

Potential chronic health effects : **CARCINOGENIC EFFECTS** Not listed.
MUTAGENIC EFFECTS Not listed.
TERATOGENIC EFFECTS Not listed.

Medical conditions aggravated by overexposure: : Repeated or prolonged exposure is not known to aggravate medical condition.

Overexposure /signs/symptoms : Inhalation of vapour can produce headache, drowsiness, dizziness, anaesthetic effect and central nervous system depression, which can lead to loss of coordination, numbness, impaired judgement, inability to concentrate and, if exposure is prolonged, unconsciousness.

See toxicological information (section 11)

4 First aid measures

Eye contact : Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. If large quantities of this material are swallowed, call a physician immediately.

Notes to physician : Support respiratory and cardiovascular function.

5 Fire fighting measures

Flammability of the product : Flammable.

Autoignition temperature : No data available.

Flash points : Closed cup: 42°C (107.6°F).

Flammable limits : No data available.

Products of combustion : These are carbon oxides (CO, CO₂).

Fire hazards in presence of various substances : Flammable in presence of open flames, sparks, static discharge and oxidizing materials.

Explosion hazards in presence of various substances : Acids, alkalis and strong oxidisers.

Fire fighting media and instructions : SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Protective clothing (fire) : Be sure to use an approved/certified respirator or equivalent.

Special remarks on fire hazards : No additional remark.

Special remarks on explosion hazards : No additional remark.

6 Accidental release measures

- Small spill and leak** : Absorb with an inert material and put the spilled material in an appropriate waste disposal.
- Large spill and leak** : Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Avoid inhalation of vapours. Prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material).

7 Handling and storage

- Handling** : Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. To avoid fire, minimize ignition sources. Do not ingest.
- Storage** : Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

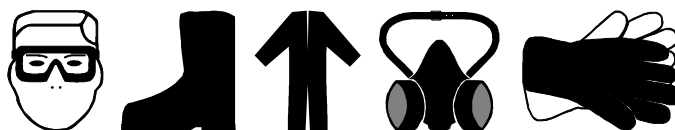
8 Exposure controls, personal protection

- Engineering controls** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Personal protection

- Eyes** : Splash goggles.
- Body** : Chemical resistant protective suit.
- Respiratory** : Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.
- Hands** : Impervious gloves.
- Feet** : Chemical resistant safety boots.

Protective clothing (pictograms)



- Personal protection in case of a large spill** : Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product name	Exposure limits
Hydrocarbon blend, may contain: Nonane	ACGIH TLV (United States, 2003) TWA: 200 ppm 8 hour(s).
Decane	AIHA WEEL (United States) TWA: 45 ppm 8 hour(s). TWA: 250 mg/m ³ 8 hour(s).
Undecane	Not available.
n-Octane	ACGIH TLV (United States, 2002) TWA: 300 ppm 8 hour(s). TWA: 1401 mg/m ³ 8 hour(s).
	OSHA PEL Z1 (United States, 2002). : 500 ppm : 2350 mg/m ³
Dodecane	Not available.

9 Physical and chemical properties

- Physical state and appearance** : Clear liquid.
- Color** : Colourless.
- Odor** : Slight odour.
- Taste** : No data available.
- Molecular weight** : Not applicable.
- Molecular formula** : Not applicable.
- pH (1% soln/water)** : Not applicable.
- Boiling/condensation point** : 150-200°C
- Melting/freezing point** : No data available.

Critical temperature	: No data available.
Specific gravity	: 0.73 (Water = 1) @ 20°C
Vapor pressure	: 7kPa @ 20°C
Vapor density	: No data available.
Volatility	: 100% w/w
Odor threshold	: No data available.
Evaporation rate	: No data available.
VOC	: No data available.
Viscosity	: Kinetic: 0.93 cSt @ 40°C
LogK_{ow}	: No data available.
Ionicity (in water)	: No data available.
Dispersion properties	: No data available.
Solubility	: Insoluble in water.
Physical chemical comments	: No additional remark.

10 Stability and reactivity

Stability and reactivity	: The product is stable.
Conditions of instability	: Heat. Prolonged storage at elevated temperatures may interfere with quality.
Incompatibility with various substances	: Avoid contact with strong oxidizing agents.
Hazardous decomposition products	: Flue gas, carbon monoxide.
Hazardous polymerization	: Will not occur.

11 Toxicological information

Toxicity to Animals	: Acute toxicity of the vapor (LC50): 118 mg/m ³ 4 hour(s) [Rat]. (n-Octane).
Chronic effects on humans	: No data available.
Other toxic effects on humans	: No known effects.
Special remarks on toxicity to animals	: No additional remark.
Special remarks on chronic effects on humans	: No additional remark.
Special remarks on other toxic effects on humans	: No additional remark.

12 Ecological information

Ecotoxicity	: No data available.
BOD and COD	: No data available.
Biodegradable/OECD	: Paraffins are biodegradable.
Mobility	: No data available.
Products of degradation	: No data available.
Toxicity of the products of biodegradation	: No data available.
Special remarks on the products of biodegradation	: No additional remark.





13 Disposal considerations

Waste information : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste stream : No data available.

Consult your local or regional authorities.

14 Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	UN 3295	HYDROCARBONS, LIQUID, N.O.S.	DOT Class 3: Flammable liquid.	III		-
TDG Classification	UN 3295	HYDROCARBONS, LIQUID, N.O.S.	TDG Class 3: Flammable liquid.	III		
IMDG Class	UN 3295	HYDROCARBONS, LIQUID, N.O.S.	IMDG Class 3: Flammable liquid.	III		-
IATA-DGR Class	UN 3295	HYDROCARBONS, LIQUID, N.O.S.	IATA Class 3: Flammable liquid.	III		-

15 Regulatory information

HCS classification : Class: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

U.S. Federal regulations : TSCA 4(a) proposed test rules: Nonane
TSCA 8(a) PAIR: Nonane
TSCA 8(b) inventory: n-Octane; Nonane; Decane; Undecane; Dodecane
TSCA 8(d) H and S data reporting: Nonane

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 307: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 accidental release prevention: No products were found.

Clean air act (CAA) 112 regulated flammable substances: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

State regulations : Connecticut hazardous material survey.: n-Octane
Rhode Island RTK hazardous substances: n-Octane; Nonane; Decane
Pennsylvania RTK: n-Octane; Nonane; Decane
Minnesota: n-Octane; Nonane
Massachusetts RTK: n-Octane; Nonane
Massachusetts spill list: n-Octane; Nonane
New Jersey: n-Octane; Undecane
New Jersey spill list: Decane

California prop. 65: No products were found.

EU Regulations

Hazard symbol(s)**Classification**

: Dangerous for the environment, Harmful

Risk phrases

: R10- Flammable.
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65- Harmful: may cause lung damage if swallowed.
 R66- Repeated exposure may cause skin dryness or cracking.
 R67- Vapors may cause drowsiness and dizziness.

Safety phrases

: S9- Keep container in a well-ventilated place.
 S16- Keep away from sources of ignition - No smoking.
 S24/25- Avoid contact with skin and eyes.
 S60- This material and its container must be disposed of as hazardous waste.
 S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.
 S62- If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

EINECS Number

: 203-892-1 (Octane), 203-913-4 (Nonane), 204-686-4 (Decane), 214-300-6 (Undecane),
 203-967-9 (Dodecane), 211-09-34 (Tridecane).

16 Other information

National Fire Protection Association (U.S.A.)

**References**

: - LOLI Database: The regulated Chemicals List of Lists.
 - CHEMINFO: Canadian Centre for Occupational Health and Safety, Issue: 97-3 (August, 1997).- BDH; Hazard Data Disk, Version 3.- CESARS: Chemical Evaluation and Retrieval System, Produced by: Ontario Ministry of Environment and Michigan Department of Natural Resources, Issue:97-3 (August, 1997).- TOMES Plus System: Toxicology, Occupational Medicine & Environmental Series: incorporating:- MEDITEX, HAZARDTEXT, 1st Medical Response Protocols, INFOTEXT, HSDB, CHRIS, OHM/TADS, IRIS, NIOSH Pocket Guide, RTECS, NJ Fact Sheets, North American Emergency Response Guides, REPROTEXT, REPROTOX, TERIS, Shepard's Catalog of Teratogenic Agents.

Other special considerations

: No additional remark.

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: No Previous Validation.

Version

: 2

Verified by

: Derick Johannes.

Notice to reader

This MSDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product, and in particular how to safely handle, use, store and transport the product in the workplace. Since SASOL and its subsidiaries cannot anticipate or control conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review this MSDS in the context of how the user intends to handle, use, store or transport the product in the workplace and beyond, and communicate such information to all relevant parties. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. In such event our liability shall be limited only to direct damages suffered. Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request. All risk associated with the possession and application of the product passes on delivery.