



MATERIAL SAFETY DATA SHEET

Revised 22nd October 2012

LOW ODOUR WHITE SPIRIT

SECTION 1: IDENTIFICATION OF SUBSTANCE/PREPARATION & COMPANY

1.1. Product identifier

Product/Material name: **LOW ODOUR WHITE SPIRIT**
REACH Reg. Name Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics,
<2% aromatics
REACH Reg. number: 01-2119463258-XXXX

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

Applications: Petroleum Solvent

1.3. Details of the Supplier of the safety data sheet

Supplier: R.K. & J. Jones Limited
Address: Southery Road, Feltwell
Thetford, Norfolk, IP26 4EH, UK.
Telephone: 01842 828101

1.4. Emergency telephone number

UK – 01923 694000 /01223 968282
NHS Direct: 0845 4647 / Textphone 0845 6064647

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

For the full text of the H-Statements mentioned in this Section, see Section 2.2

Classification

Flammable liquids – Category 3 – H226
Aspiration toxicity – Category 1 – H304
Specific target organ systemic toxicity (single exposure) – Category 3 – H336

DIRECTIVE 67/548/EEC or 1999/45/EC

For the full text of the R-phrases mentioned in this Section, see Section 16.

The substance/mixture is classified as dangerous in accordance with Directive(s) 67/548/EEC with amendments and/or 1999/45/EC with amendments

Symbol(s)

Xn – Harmful

Classification

R10 – Xn; R65 – R66 – R67

2.2. Label elements

Labelled according to: REGULATION (EC) No 1272/2008

EC Label 919-857-5

Hazard pictograms**Signal Word**

DANGER

Hazard Statements

H226-Flammable liquid and vapour

H304-May be fatal if swallowed and enters airways

H336-May cause drowsiness or dizziness

Precautionary statementsP370 + P378 – In case of fire: Use carbon dioxide (CO₂) or dry chemical extinguisher for extinction

P261 – Avoid breathing dust/fume/gas/mist/vapours/spray

P271 – Use only outdoors or in a well-ventilated area

P280 – Wear protective gloves and eye/face protection

P331 – Do NOT induce vomiting

Supplemental Hazard Statements

EUH066 – Repeated exposure may cause skin dryness or cracking

Contains Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3. Other hazards**Physical-Chemical Properties** Vapours may form explosive mixtures with air.

Vapours are heavier than air and may spread near to ground level to sources of ignition

Environmental properties

Should not be released into the environment.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1. Substance****Chemical nature**

A complex and variable combination of paraffinic and cyclic hydrocarbons having a carbon number range predominantly of C9 to C11 and boiling in the range of approximately 130 °C to 210 °C
The aromatic content is < 2%

Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Dir. 67/548)	GHS Classification
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	919-857-5	01-2119463258-33	^	100	R10;R65	Flam. Liquid3 (H226) Asp. Tox. 1 (H304) STOT SE 3 (H336)

Additional information

The EC substance definition and related classification and labelling has been developed in the framework of the Regulation (EC) No 1907/2006 (REACH). For information about the related CAS number see section 15 of this MSDS.

For the full text for the R-Phrases mentioned in this section, see section 16.

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

General Advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.
Eye Contact:	Rinse thoroughly with water, also under the eyelids. Keep eye wide open while rinsing.
Skin Contact:	Remove contaminated clothing and shoes. Wash skin with soap and water.
Inhalation:	In case of exposure to intense concentration of vapours, fumes or spray, transport the person away from the contaminated zone, keep warm and allow to rest.
Ingestion:	If swallowed. DO NOT INDUCE VOMITING. Seek medical help immediately. Risk of product entering lungs on vomiting after ingestion. In this case, the casualty should be sent immediately to hospital.
Protection of first-aiders	Use personal protective equipment.

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

Eye contact	Contact with eyes may cause irritation
Skin Contact	Redness – Repeated exposure may cause skin dryness or cracking.
Inhalation	Vapours may cause drowsiness and dizziness. May cause irritation. Inhalation of vapours may cause headache, nausea, vomiting and an state of consciousness.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause central nervous system depression. Harmful: If swallowed accidentally, the product may enter the lungs due to low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions (medical survey during 48 hours).

4.3. Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
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SECTION 5 : FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media:	Foam. Dry Powder. Carbon dioxide (CO ₂). Water spray
Unsuitable extinguishing media:	Do not use a solid water stream as it may scatter and spread fire

5.2. Special hazards arising from the substance or mixture:

Special hazard	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration.
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5.3. Precautions for fire-fighters:

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus and protective suit.. In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus(SCBA) with full face-piece operated in positive pressure mode.

Other information: Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

General Information: Use personal protective equipment.
Evacuate non-essential personnel.
Ensure adequate ventilation, especially in confined areas.
Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area)
Do not touch or walk through spilled material.

6.2. Environmental precautions

General Information: Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. The product should not be allowed to enter drains, water courses or the soil. Local authorities should be advised if significant spillages cannot be contained.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up: Use non-sparking hand tools and explosion proof electrical equipment. Contain spillage, and then collect 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). Following product recovery, flush area with water.

6.4. Reference to other sections

Personal protective equipment: See Section 8 for more details

Waste treatment: See Section 13

Other information: Remove all sources of ignition.
Stop all work that requires a naked flame, stop all vehicles, stop all machines and equipment that may cause sparks or flames.

SECTION 7 : HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling: For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapours or spray mist.
Avoid contact with skin, eyes and clothing.

Technical measures:	Ensure adequate ventilation. Do not spray at high pressure (> 3 bar). WHILE MOVING THE PRODUCT: To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not allow splash loading and ensure that the product is poured slowly, particularly at the beginning of the operation.
Prevention of fire and explosion:	OPERATE ONLY ON COLD AND DEGASSED TANKS IN VENTILATED PREMISES (TO AVOID RISK OF EXPLOSION). Handle screened from all potential inflammation sources (uncovered flame, sparks, electrical arches..) and from heat (collectors or hot walls). Do not smoke. Use explosion proof electrical equipment. Take precautionary measures against static discharges. Do not use compressed air for filling, discharging or handling. Design installations (machinery and equipment) to prevent burning product from spreading (tanks, retention systems, interceptors (traps) in drainage systems).
Hygiene measures:	Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Do not dry hands with rags that have been contaminated with product. Do not use abrasives, solvents or fuels. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions:

Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Storage installations should be designed with adequate bunds so as to prevent ground or water pollution in case of leaks or spills. Use explosion proof electrical equipment. Keep in a bunded area. Keep dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Ground/bond containers, tanks and transfer/receiving equipment. Store at room temperature. Keep containers tightly closed and properly labelled.

Materials to avoid: Strong acids. Oxidizing agents.

Packaging material: Keep only in the original container or in a suitable container for this kind of product. Steel, Stainless steel.

7.3. Specific use(s)

SECTION 8 : EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure limits: Components with workplace control parameters

Legend: See section 16

Advisory OEL CEFIC-HSPA : 1200 mg/m³

DNEL Worker (Industrial/Professional)

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics ^			208 mg/kg bw/day (dermal) 871 mg/m ³ /8h (inhalation)	

DNEL Consumer

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics ^			125 mg/kg bw/day (dermal) 185 mg/m ³ /24h (inhalation) 125 mg/kg bw/day (oral)	

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures: When working in confined spaces (tanks, containers, etc.) ensure that there is a supply of air suitable for breathing and wear the recommended equipment. Apply technical measures to comply with occupational exposure limits.

Personal protective equipment

General Information: Protective engineering solutions should be implemented and in use before personal protective equipment is considered. These recommendations apply to the product as supplied. If the product is used in mixtures, it's recommended that you contact the appropriate protective equipment suppliers.

Respiratory protection: For rescue and maintenance work in storage tanks use self-contained breathing apparatus. In an emergency or for exceptional short-lasting jobs in an atmosphere polluted by the product, it's necessary to wear a protective respiratory equipment.
The use of breathing apparatus must comply strictly with manufacturer's instructions and the regulations governing their choices and uses.

Eye Protection: If splashes are likely to occur, wear: Safety glasses with side-shields.

Skin and body protection: Wear suitable protective clothing. Protective shoes or boots.

Hand Protection: Impervious gloves, aliphatic hydrocarbon resistant.

Repeated or prolonged exposure			
Glove material	Glove thickness	Break through time	Remarks
Nitrile rubber	> 0.45 mm	> 480 min	EN 374
PVA, Fluorinated rubber		> 480 min	EN 374

In case of contact through splashing:			
Glove material	Glove thickness	Break through time	Remarks
Chloroprene	> 0.7 mm	> 60 min	EN 374
Nitrile rubber	> 0.3 mm	> 60 min	EN 374

Environmental exposure controls

General Information: Do not allow material to contaminate ground water system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1. Information on basic physical and chemical properties

Colour colourless
 Physical state @20°C Liquid
 Odour characteristic

<u>Property</u>	<u>Values</u>	<u>Remarks</u>	<u>Method</u>
pH		not applicable	
Boiling point/boiling range	150 - 200 °C 302 - 401 °F		ISO 3405 ISO 3405
Flash point	> 41 °C		ISO 2719
Evaporation rate	> 106 °F 65	EtEt=1	ISO 2719. DIN 53170
Flammability Limits in Air			
Upper	8 %		
Lower	0.6 %		
Vapour pressure	4 hPa	@ 15 °C	
Vapour density		No information available	
Density	> - 770 kg/m ³	@ 15 °C	ISO 12185
Water solubility		not applicable	
Solubility in other solvents		No information available	
logPow		not applicable	
Autoignition Temperature	> 230 °C	This temperature may be significantly lower under particular conditions (slow oxidation on finely divided materials...)	ASTM E 659-78
Viscosity, kinematic	> 446 °F 1.09 mm ² /s	@ 40 °C	ASTM E 659-78 ASTM D 445
Explosive properties	May form explosive mixtures with air		
Oxidising Properties	not applicable		
Possibility of hazardous reactions	not applicable		

9.2. Other Information

Surface tension	0.026 N/m	@ 20 °C	EN 14370
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SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

10.2. Chemical stability: Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions: None under normal processing

10.4. Conditions to Avoid: Heat, Flames and sparks. Take precautionary measures against static discharges.

10.5. Incompatible materials: Strong oxidizing agents

10.6. Hazardous Decomposition

Products: Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects***Acute toxicity Local effects, Product Information*

Skin Contact:	<i>Symptoms: Redness</i> Repeated exposure can cause skin dryness and cracking.
Eye Contact:	Contact with eyes may cause Irritation.
Inhalation:	Vapours may cause drowsiness. May cause irritation, Inhalation of vapours may cause headache, nausea, vomiting and a n altered state of consciousness
Ingestion:	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May cause central nervous system depression. Harmful: If swallowed accidentally, the product may enter the lungs due to its low viscosity and lead to the rapid development of very serious inhalation pulmonary lesions Risk of severe pulmonary problems in case of accidental aspiration. (Medical survey during 48 hours)

Acute toxicity Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	LD50 > 5000 mg/kg bw (rat - OECD 401)	LD50 (24h) > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (8h) > 5000 mg/m ³ (vapour) (rat - OECD 403)

Sensitisation Not classified as a sensitizer

Specific Effects

Carcinogenicity This product is not classified carcinogenic.

Mutagenicity The mutagenic potential of the substance has been extensively studied in a range of in-vivo and in-vitro assays.

Germ cell mutagenicity Genetic toxicity : Negative

Toxicity for reproduction
Developmental Toxicity No information available.
Results of guideline developmental toxicity studies on the substance and OECD developmental toxicity screening studies showed no evidence of developmental toxicity in rats.

Repeated Dose Toxicity

Target Organ Effects (STOT) Central nervous system.

Specific target organ systemic Toxicity (repeated exposure) Vapours may cause drowsiness and dizziness.

Specific target organ systemic Toxicity (repeated exposure) No known effects based on information supplied

Aspiration toxicity The fluid can enter the lungs and cause damage (chemical pneumonitis, potentially fatal).

Other information

Other adverse effects Frequent or prolonged skin contact destroys the lipocid cutaneous layer and may cause dermatitis

SECTION 12 : ECOLOGICAL INFORMATION

12.1. Toxicity

Acute aquatic toxicity Product Information

Acute aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics A	ErL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) EbL50 (72h) > 1000 mg/l (Pseudokirchneriella subcapitata - OECD 201) NOELR (72h) = 3 mg/l (Pseudokirchneriella subcapitata - biomass - OECD 201) NOELR (72h) = 100 mg/l (Pseudokirchneriella subcapitata - growth rate - OECD 201)	EL50 (48h) > 1000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 1000 mg/l (Oncorhynchus mykiss - OECD 203)	

Chronic aquatic toxicity Product Information

Chronic aquatic toxicity Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics A		NOELR (21d) = 0,23 mg/l (Daphnia magna - QSAR Petrotox)	NOELR (28d) = 0,13 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	

Effects on terrestrial organisms No information available

12.2. Persistence and Degradability

General Information

Readily biodegradable (% after days)

Biodegradation						
Type:	Method	Sampling time	Specific effects	Values	Unit	Biodegradability
	OECD 301 F	28 , days		80	%	Readily biodegradable

12.3. Bioaccumulative potential

Product information Substance is a UVCB. Standard tests for this endpoint are not appropriate

logPow not applicable

Component information

12.4. Mobility in Soil: Substance is a UVCB. Standard tests for this endpoint are not Appropriate.

12.5. Results of PBT and vPvB assessment

PVT and vPvB Assessment This substance is considered not to be PBT and vPvB.

12.6. Other adverse effects

General information No information available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Waste from residues / unused products	Dispose of in accordance with the European Directives on waste and hazardous waste.
Contaminated packaging	Empty containers may contain flammable or explosive vapours. Empty containers should be taken to an approved waste handling site for recycling or disposal.
EWC Waste Disposal No	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14 : TRANSPORT INFORMATION**ADR/RID**

UN/ID No	UN3295
Proper shipping name	Hydrocarbons, liquid, n.o.s.
Hazard Class	3
Packing group	III
ADR/RID-Labels	3
Classification Code	F1
Tunnel restriction code	(D/E)
ADR Hazard Id (Kemmler Number)	30
Description	UN 3295, HYDROCARBONS, LIQUID, N.O.S., 3, PG III, (D/E)
Excepted Quantity	E1
Limited quantity	LQ7
Hazchem Code	3Y

IMDG/IMO

UN/ID No	UN3295
Proper shipping name	Hydrocarbons, liquid, n.o.s.
Hazard Class	3
Packing Group	III
EmS	F-E, S-D
Description	UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, PG III, (41°C c.c.)
Special Provisions	223
Excepted Quantity	E1
Limited quantity	5 L

ICAO/IATA

UN/ID No	UN3295
Hazard Class	3
Proper shipping name	Hydrocarbons, liquid, n.o.s.
Packing group	III
ERG Code	3L
Special Provisions	A3
Description	UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, PG III
Excepted Quantity	E1
Limited quantity	10 L

ADN

UN/ID No	UN3295
Proper shipping name	Hydrocarbons, liquid, n.o.s.
Hazard Class	3
Hazard Labels	3
Packing Group	III
Classification Code	F1
Description	UN3295, HYDROCARBONS, LIQUID, N.O.S., 3, PG III
Excepted Quantity	E1
Limited quantity	LQ7
Ventilation	VE01

SECTION 15 : REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****European Union****REACH**

The EC substance definition is included in the CAS related number description for global inventory entries

Other regulations

Directive 1999/13/EC on the limitation of emissions of volatile organic compounds
Directive 2004/42/EC on the limitation of emissions of volatile organic compounds

International Inventories

Related CAS	64742-48-9
EINECS/ELINCS	Complies
TSCA	Complies
DSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies
NZIoC	Complies

Legend

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

15.2. Chemical Safety Assessment

A chemical Safety Assessment has been carried out for this substance

15.3. National regulatory information**The United Kingdom**

Avoid exceeding occupational exposure limited (see section 8)

Ireland

Avoid exceeding occupational exposure limited (see section 8)

SECTION 16 : OTHER HEALTH AND SAFETY INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R10- Flammable
R65 - Harmful: may cause lung damage if swallowed
R66 - Repeated exposure may cause skin dryness or cracking
R67 - Vapours may cause drowsiness and dizziness

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

H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H336 - May cause drowsiness or dizziness

Abbreviations, acronyms

bw/day = body weight/day
bw = body weight

Legend Section 8

+	Sensitiser	*	Skin designation
**	Hazard Designation	C:	Carcinogen
M:	Mutagen	R:	Toxic to reproduction

Revision Date:

2011-02-21

Revision Note

*** Indicates updated section

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**Disclaimer:**

If this product is re-distributed and re-formulated for sale, details of its hazards and recommended methods for safe handling must be passed to customers. Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by a work activity using this product is undertaken before this product is used.

Note: The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other Health & Safety Legislation (e.g. the Health and Safety at Work Act, 1974; the control of Substances Hazardous to Health Regulations, 1988). The data given here is based on current knowledge and experience. The purpose of this data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.