#### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### **1.1 Product Identifier**

Material Name	:	Shell Mysella XL 40
Product Code	:	901L4455

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

Product Use	:	Engine oil.
Uses Advised Against	:	This product must not be used in applications other than the above without first seeking the advice of the supplier.

## 1.3 Details of the Supplier of the safety data sheet

Manufacturer/Supplier	:	Shell UK Oil Products Limited Shell Centre London SE1 7NA United Kingdom
Telephone Email Contact for Safety Data Sheet	:	(+44) 08708500939 If you have any enquiries about the content of this SDS please email lubricantSDS@shell.com

## 1.4 Emergency Telephone Number

: +44-(0) 151-350-4595

## 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

67/548/EEC or 1999/45/EC	
Hazard Characteristics	R-phrase(s)
Dangerous for the environment.	R52/53

Sensitiser not sufficient to classify : Contains calcium sulphonate. May produce an allergic reaction.

### Labeling according to Directive 1999/45/EC

EC Symbols	:	No Hazard Symbol required
EC Classification EC Risk Phrases EC Safety Phrases	:	Dangerous for the environment. R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.
2.3 Other Hazards		
Health Hazards	:	Not expected to be a health hazard when used under normal conditions. Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis. Used oil may contain harmful impurities.
Safety Hazards	:	Not classified as flammable but will burn.
Environmental Hazards	:	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2	Mixtures
<b>U</b> . <b>E</b>	

**Mixture Description** : Highly refined mineral oils and additives.

Hazardous Components

## Classification of components according to Regulation (EC) No 1272/2008

Chemical Name	CAS No.	EINECS	REACH Registration No.	Conc.
Polyolefin polyamine succinimide				1.00 - 3.00%
Calcium alkaryl sulphonate	90480-91-4	291-829-9		1.00 - 3.00%
Butylated hydroxytoluene	128-37-0	204-881-4	01-2119565113-46	0.24 - 1.00%

Calcium alkaryl sulphonate	68610-84-4	271-877-7			0.10 - 0.50%
	· · · ·			·····	<b>A</b>
Chemical Name	Hazard	Class & Category		Hazard	Statement
Polyolefin polyamine succinimide	Aqua	atic Chronic, 4;		Н	413;
Calcium alkaryl sulphonate	Aqua	atic Chronic, 4;		Н	413;
Butylated hydroxytoluene	Aqua	atic Chronic, 1;		Н	410;
Calcium alkaryl sulphonate	Skin Sens.,	1; Aquatic Chronic	;, 4;	H317	′; H413;

#### Classification of components according to 67/548/EEC

Chemical Name	CAS No.	EINECS	REACH Registration No.	Symbol(s)	R-phrase(s)	Conc.
Polyolefin polyamine succinimide					R53	1.00 - 3.00%
Calcium alkaryl sulphonate	90480-91-4	291-829-9			R53	1.00 - 3.00%
Butylated hydroxytoluene	128-37-0	204-881-4	01- 2119565113- 46	N	R50/53	0.24 - 1.00%
Calcium alkaryl sulphonate	68610-84-4	271-877-7		Xi	R43; R53	0.10 - 0.50%

Additional Information

The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Refer to Ch 16 for full text of R- and H- phrases.

## 4. FIRST AID MEASURES

4.1 Description of First Aid Measures			
General Information	: Not expected to be a health hazard when used under normal conditions.		
Inhalation	<ul> <li>No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.</li> </ul>		
Skin Contact	: Remove contaminated clothing. Flush exposed area with water		

3/13

Eye Contact	<ul> <li>and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.</li> <li>Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.</li> </ul>
Ingestion	: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
4.2 Most important symptoms and effects, both acute and delayed 4.3 Indication of any immediate medical attention and special treatment needed	<ul> <li>Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.</li> <li>Treat symptomatically.</li> </ul>

## 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

5.1 Extinguishing Media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable Extinguishing Media	:	Do not use water in a jet.
5.2 Special hazards arising from the substance or mixture	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
5.3 Advice for firefighters	:	Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

## 6. ACCIDENTAL RELEASE MEASURES

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

6.1 Personal Precautions, Protective Equipment and Emergency Procedures	Avoid contact with skin and eyes.
6.2 Environmental Precautions	Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
6.3 Methods and Material for Containment and	Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or
	4/13

Cleaning Up		other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional Advice	:	Local authorities should be advised if significant spillages cannot be contained.
6.4 Reference to other sections	:	For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Material Safety Data Sheet.

## 7. HANDLING AND STORAGE

General Precautions	:	Use local exhaust ventilation if there is risk of inhalation of vapours, mists or aerosols. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material.
7.1 Precautions for Safe Handling	:	Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used.
7.2 Conditions for safe storage, including any incompatibilities	:	Keep container tightly closed and in a cool, well-ventilated place. Use properly labelled and closeable containers. Store at ambient temperature. The storage of this product may be subject to the Control of Pollution (Oil Storage) (England) Regulations. Further guidance may be obtained from the local environmental agency office.
Additional Information	:	Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion. Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".
Recommended Materials	:	For containers or container linings, use mild steel or high density polyethylene.
Unsuitable Materials	:	PVC.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

If the American Conference of Governmental Industrial Hygienists (ACGIH) value is provided on this document, it is provided for information only.

## 8.1 Control Parameters

## **Occupational Exposure Limits**

Material	Source	Туре	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA(Inhala ble fraction.)		5 mg/m3	

## **Biological Exposure Index (BEI)**

Data not available	
PNEC related information	: Substance is a hydrocarbon with a complex, unknown or variable composition. Conventional methods of deriving PNECs are not appropriate and it is not possible to identify a single representative PNEC for such substances.
8.2 Exposure Controls General Information	<ul> <li>The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations. Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.</li> </ul>
Occupational Exposure	ontrols
Personal Protective Equipment Eve Protection	<ul> <li>Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.</li> <li>Wear safety glasses or full face shield if splashes are likely to</li> </ul>

	occur. Approved to EU Standard EN166.
Hand Protection	<ul> <li>Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. Always</li> </ul>

	seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.
Body protection :	Skin protection not ordinarily required beyond standard issue work clothes.
Respiratory Protection : Thermal Hazards :	No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [boiling point >65 °C (149 °F)] meeting EN14387. Not applicable.
Monitoring Methods	Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.
Environmental Exposure Con Environmental exposure : control measures	trols Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

Appearance	: Amber. Liquid at room temperature.
Odour	: Slight hydrocarbon.
Odour threshold	: Data not available
рН	: Not applicable.
Initial Boiling Point and	: > 280 °C / 536 °F estimated value(s)
Boiling Range	
Pour point	: Typical -18 °C / 0 °F
Flash point	: > 240 °C / 464 °F (COC)
Upper / lower Flammability	: Typical 1 - 10 %(V) (based on mineral oil)
	7/13

Print Date 29.09.2012

00000000263 MSDS\_GB

or Explosion limits Auto-ignition temperature Vapour pressure Specific gravity Density Water solubility Solubility in other solvents		<ul> <li>&gt; 320 °C / 608 °F</li> <li>&lt; 0.5 Pa at 20 °C / 68 °F (estimated value(s))</li> <li>Typical 0.89 at 15 °C / 59 °F</li> <li>Typical 890 kg/m3 at 15 °C / 59 °F</li> <li>Negligible.</li> <li>Data not available</li> </ul>
n-octanol/water partition coefficient (log Pow) Dynamic viscosity Kinematic viscosity Vapour density (air=1) Evaporation rate (nBuAc=1) Decomposition Temperature Flammability	: : : : : : : : : : : : : : : : : : : :	<ul> <li>&gt; 6 (based on information on similar products)</li> <li>Data not available</li> <li>Typical 14 mm2/s at 100 °C / 212 °F</li> <li>&gt; 1 (estimated value(s))</li> <li>Data not available</li> <li>Data not available</li> <li>Data not available</li> </ul>
9.2 Other Information		
Other Information Volatile organic carbon content	:	not a VOC 0 %

## **10. STABILITY AND REACTIVITY**

10.1 Reactivity 10.2 Chemical stability	:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph. Stable.
10.3 Possibility of Hazardous Reactions 10.4 Conditions to Avoid 10.5 Incompatible Materials	::	Reacts with strong oxidising agents. Extremes of temperature and direct sunlight. Strong oxidising agents.
10.6 Hazardous Decomposition Products	:	Hazardous decomposition products are not expected to form during normal storage.

## **11. TOXICOLOGICAL INFORMATION**

11.1 Information on Toxicological effects			
Basis for Assessment	:	Information given is based on data on the components and the	

Print Date 29.09.2012

8/13

00000000263 MSDS\_GB

		to	xicology of similar products.	
	Likely Routes of	: S	kin and eye contact are the primary routes of exp	osure
	Exposure	al	though exposure may occur following accidental	ingestion.
	Acute Oral Toxicity	: E	xpected to be of low toxicity: LD50 > 5000 mg/kg	, Rat
	Acute Dermal Toxicity	: E	xpected to be of low toxicity: LD50 > 5000 mg/kg	, Rabbit
	Acute Inhalation Toxicity	: N	ot considered to be an inhalation hazard under no	ormal
		CC	onditions of use.	
	Skin corrosion/irritation	: E	xpected to be slightly irritating. Prolonged or repe	ated skin
		CC	ontact without proper cleaning can clog the pores	of the skin
		re	sulting in disorders such as oil acne/folliculitis.	
	Serious eye	: E:	xpected to be slightly irritating.	
	damage/irritation			
	Respiratory Irritation	: In	halation of vapours or mists may cause irritation.	
	Respiratory or skin	: N	ot expected to be a skin sensitiser.	
	sensitisation			
	Aspiration Hazard	: N	ot considered an aspiration hazard.	
	Germ cell mutagenicity	: N	ot considered a mutagenic hazard.	
	Carcinogenicity	: P	roduct contains mineral oils of types shown to be	non-
		Ca	arcinogenic in animal skin-painting studies. Highly	/ refined
		m	ineral oils are not classified as carcinogenic by th	ıe
		In	Iternational Agency for Research on Cancer (IAR	C). Other
		C	omponents are not known to be associated with c	arcinogenic
		e	ifects.	0
	Reproductive and	: N	ot expected to be a hazard.	
	Developmental Toxicity		·	
	Specific target organ	: N	ot expected to be a hazard.	
	toxicity - single exposure		·	
	Specific target organ	: N	ot expected to be a hazard.	
	toxicity - repeated		·	
	exposure			
	Additional Information	: U	sed oils may contain harmful impurities that have	:
		a	ccumulated during use. The concentration of such	n impurities
		W	ill depend on use and they may present risks to h	ealth and
		th	e environment on disposal. ALL used oil should t	be handled
		w	ith caution and skin contact avoided as far as pos	ssible
		Ċ	ontinuous contact with used engine oils has caus	ed skin
		Cá	ancer in animal tests	
12.	ECOLOGICAL INFORMATIO	N		
		-		
	Basis for Assessment	: E	cotoxicological data have not been determined sr	pecifically for
		th	is product. Information given is based on a know	ledge of the
		CC	production of similar productin of similar production of similar production of similar p	ucts.
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Dri	nt Date 20.00.2012		9/13	000000000
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12.1 Toxicity Acute Toxicity	:	Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be harmful: LL/EL/IL50 10-100 mg/l (to aquatic organisms) LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract.
12.2 Persistence and degradability 12.3 Bioaccumulative	:	Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegradable, but the product contains components that may persist in the environment. Contains components with the potential to bioaccumulate.
Fotentia		
12.4 Mobility	:	Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
12.5 Result of PBT and vPvB assesment	:	The substance does not fulfill all screening criteria for persistence, bioaccumulation and toxicity and hence is not considered to be PBT or vPvB.
12.6 Other Adverse Effects	:	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

## **13. DISPOSAL CONSIDERATIONS**

#### **13.1 Waste Treatment Methods**

Material Disposal :	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation :	Disposal should be in accordance with applicable regional, national, and local laws and regulations. EU Waste Disposal Code (EWC): 13 02 05 mineral-based non- chlorinated engine, gear and lubricating oils. Classification of
	10/13

waste is always the responsibility of the end user. Hazardous Waste (England and Wales) Regulations 2005.

#### 14. TRANSPORT INFORMATION

#### Land transport (ADR/RID):

#### ADR

This material is not classified as dangerous under ADR regulations.

#### RID

This material is not classified as dangerous under RID regulations.

#### Inland waterways transport (ADN):

This material is not classified as dangerous under ADN regulations.

#### Sea transport (IMDG Code):

This material is not classified as dangerous under IMDG regulations.

#### Air transport (IATA):

This material is either not classified as dangerous under IATA regulations or needs to follow country specific requirements.

#### **15. REGULATORY INFORMATION**

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

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

Other regulatory Information	n	
Authorisations and/or	:	Product is not subject to Authorisation under REACh.
restrictions on use		

#### Chemical Inventory Status

: All components	
listed or polyme	r
exempt.	
: All components	
listed.	
	<ul> <li>All components listed or polyme exempt.</li> <li>All components listed.</li> </ul>

Other Information	: Environmental Protection Act 1990 (as amended).	
	11/13	

Print Date 29.09.2012

00000000263 MSDS\_GB

Health and Safety at Work etc. Act 1974. Consumers Protection Act 1987. Pollution Prevention and Control Act 1999. Environment Act 1995. Factories Act 1961. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 1992. Hazardous Waste (England and Wales) Regulations 2005(as amended). Control of Major Accident Hazards Regulations 1999 (as amended). Renewable Transport Fuel Obligations Order 2007 (as amended). Energy Act 2011. Environmental Permitting (England and Wales) Regulations 2010 (as amended). Waste (England and Wales) Regulations 2011 (as amended). Planning (Hazardous Substances) Act 1990 and associated regulations. The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011.

## **16. OTHER INFORMATION**

R-phrase(s)	
R43	May cause sensitisation by skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R53	May cause long-term adverse effects in the aquatic environment.

#### **CLP Hazard Statements** H317 May cause an allergic skin reaction. H410 Very toxic to aquatic life with long lasting effects. H413 May cause long lasting harmful effects to aquatic life. Identified Uses according to the Use Descriptor System Recommended : This product must not be used in applications other than the **Restrictions on Use** above without first seeking the advice of the supplier. (Advice Against) **Other Information SDS Distribution** ÷ The information in this document should be made available to all who may handle the product. **SDS Version Number** 3.0 1 **SDS Effective Date** 28.09.2012 : **SDS** Revisions : A vertical bar (|) in the left margin indicates an amendment from the previous version. SDS Regulation Regulation 1907/2006/EC 1 Disclaimer This information is based on our current knowledge and is 5 intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.