

Revision Date : 30.08.2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product name Product use	: Engen Xtreme 15W-40 : Automotive lubricant
Supplier	: Engen Petroleum Limited (Tel: +27 (0) 21 403 4911, a/h: +27 (0) 21 403 4099)
Poisons Information Helpline Spill Response Customer Service Centre Engen Website	 0861 555 777 (South Africa) 086 100 0366 (South Africa) 0860 036 436 (Sales and Technical Information) http://www.engen.co.za/

2. HAZARDS IDENTIFICATION

Emergency response data	:	Amber Liquid.	DOT ERG No Not applicable.

GHS Classification:

Health Skin corrosion/irritati	on	Not classified.
Environmental Acute toxicity Chronic toxicity		: Not classified. : Not classified.
Physical Flammability	:	Not classified.
<u>Signal Word</u>	:	None

GHS Labels/Pictograms:

Hazard Statements

None.

Precautionary Statements

Prevention

Do not handle until all safety precautions have been read and understood.

Response

IN CASE OF FIRE: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. IF IN EYES: Rinse cautiously with water for several minutes. IF SWALLOWED: Get medical attention if you feel unwell. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breath. Call a POISON CENTRE or doctor if you feel unwell. IF ON SKIN: Wash with plenty of soap and water.

Storage

Store in accordance with local regulations and municipal bylaws.

Disposal

Do not discharge into lakes, streams, ponds and ground water supply.

See Section 11 for further health effects/toxicological data.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight%
Zinc alkyldithiophosphate	84605-29-8	< 2.00

See Section 8 for Exposure Limits (if applicable).

4. FIRST AID MEASURES		
Inhalation	:	Not expected to be a problem. However, if respiratory irritation occurs due to excessive vapour or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical device or use mouth-to-mouth resuscitation.
Skin contact	:	Remove contaminated clothing. Dry wipe exposed skin and cleanse with hand cleaner, soap and water. Launder contaminated clothing before reuse. (See Section 16 - Injection Injury)
Eye contact	:	Flush thoroughly with water. If irritation occurs call a doctor.
Ingestion	:	Not expected to be a problem. However, if discomfort occurs seek medical attention. Do not induce vomiting.

5. FIRE-FIGHTING MEASU	RES	
Extinguishing media	:	Carbon dioxide, foam, dry chemical and water fog.
Special fire fighting procedure	:	Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, municipal sewers, or drinking water supply.
Special protective equipment for firefighters	:	For fires in enclosed areas, fire fighters must use Self-Contained Breathing Apparatus.
Unusual fire and explosive hazards	:	None.
Products of decomposition	:	Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.
Flash Point Upper Explosion Limit (UEL) Lower Explosion Limit (LEL) NFPA Hazard Id	: : :	> 210 °C (ASTM D-92) 7.0 %(V) 0.9 %(V) Health: 0; Flammability: 1; Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

Procedure if material is released or spilled	:	Report spills/releases as required to appropriate authorities.
Methods for cleaning up	:	LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping using explosion-proof equipment or contain spilled liquid with sand or other suitable absorbent and remove mechanically into containers. If

		necessary, dispose of absorbed residues as directed in Section 13. WATER SPILL: Notify port and relevant authorities. Confine with booms if skimming equipment is available to recover the spill for later recycling or disposal. Warn other ships in the vicinity. If allowed by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.
Personal precautions	:	See Section 8.
Environmental precautions	:	Prevent spill from entering municipal sewers, water sources or low lying areas. Advise the relevant authorities if contaminations have occurred.
7. HANDLING AND STORAG	GE	
7. HANDLING AND STORAC	GE :	No special precautions are necessary beyond normal good hygiene practices.
	GE :	

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits (OELs)

Components	CAS-No.	Source	TWA	Valu	le	Notations
Base oil package		ACGIH TLV	LTEL	5 mg/m3		Oil mists

LTEL: Long Term Exposure Limits - Time Weight Average (TWA) over 8 hours.

STEL: Short Term Exposure Limits - Time Weight Average (TWA) over 15 Minutes

Note: Limits Shown for guidance only. Follow applicable regulations.

Personal Protective Equipment (PPE)

Engineering controls	:	If mists are generated, use ventilation, local exhaust or enclosures to control below exposure limits.
Respiratory protection	:	Approved respiratory equipment must be used when mist concentrations exceed the recommended exposure limits.
Eye protection	:	If splash with liquid is possible, chemical type goggles should be worn.
Skin and body protection	:	No special equipment required. However, if frequent splashing or liquid contact is likely to occur, wear oil impervious gloves and clothing. Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid.
Colour	:	Amber
Odour	:	Mild
Solubility	:	Negligible

Boiling point	:	> 316 °C
Flash Point	:	> 210 °C (ASTM D-92)
Upper Explosion Limit (UEL)	:	7.0 %(V)
Lower Explosion Limit (LEL)	:	0.9 %(V)
Vapour pressure	:	< 0.1 hPa
Density	:	0.8799 g/cm3 @ 20 °C (ASTM D-4052)
Pour point	:	-21 °C
Viscosity, kinematic	:	14.50 mm2/s @ 100 °C (ASTM D-445)
		108.9 mm2/s @ 40 °C (ASTM D-445)

10. STABILITY AND REACTIVITY

Stability	:	Stable.	
Conditions to avoid	:	Extreme heat and high energy sources of ignition, such as sparks and static electricity.	
Materials to avoid	:	Strong oxidizers.	
Hazardous decomposition products	:	Fumes, smoke, carbon monoxide, sulphur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.	

11. TOXICOLOGICAL INFORMATION

Acute toxicity Components

Zinc alkyldithiophosphate

Acute oral toxicity Acute inhalation toxicity Acute dermal toxicity	:	No available data. No available data. No available data.
Skin corrosion/irritation <u>Components</u>		
Zinc alkyldithiophosphate Result	:	Causes skin irritation.
Eye irritation <u>Components</u>		
Zinc alkyldithiophosphate Result Sensitization <u>Components</u>	:	Causes serious eye damage.
Zinc alkyldithiophosphate Remarks	:	This product is not a skin sensitizer.
Germ cell mutagenicity <u>Components</u>		
Zinc alkyldithiophosphate Remarks	:	No known significant effects or critical hazards.
Carcinogenicity <u>Components</u>		
Zinc alkyldithiophosphate Remarks Reproductive toxicity (Teratogenio	: city)	Not classifiable as a human carcinogen.

<u>Components</u> Zinc alkyldithiophosphate Remarks <u>STOT - single exposure</u> <u>Components</u>	:	No known significant effects or critical hazards.
Zinc alkyldithiophosphate Remarks	:	No known significant effects or critical hazards.
Specific target organ toxicity (S <u>Components</u>	тот)	- repeated exposure
Zinc alkyldithiophosphate Remarks	:	No known significant effects or critical hazards.
Aspiration hazard <u>Components</u>		
Zinc alkyldithiophosphate Remarks	:	No available data.
12. ECOLOGICAL INFORMATION	I	
Ecotoxicity effects <u>Components</u>		
	:	No available data. No available data.
Components Zinc alkyldithiophosphate Acute toxicity	:	
Components Zinc alkyldithiophosphate Acute toxicity Chronic toxicity Persistence and degradability	:	

13. DISPOSAL CONSIDERATIONS

Waste disposal	:	Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and considerations of product characteristics at time of disposal.
Contaminated packaging	:	Empty containers retain residue (liquid and/or vapour) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental

		regulations.
Other regulations	:	The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.
Flash Point	:	> 210 °C (ASTM D-92)

14. TRANSPORT INFORMATION

Note	:	This product is not regulated by the following: U.S. DOT (CFR), ADR, IATA and IMDG.
Static Accumulator (50 picosiemens or less)	:	Yes

15. REGULATORY INFORMATION

South African Legislation and Standards	:	South African OHS Act, 85 of 1993: Hazardous Chemical Substances, Regulation 9A National Environmental Management: Waste Act 2008 South African Guidelines SANS 10234:2008 - Globally Harmonized System of classification & labelling of chemicals SANS 11014:2010 - Safety data sheet for chemical products - Content & order of sections
US OSHA Hazard Communication Standard	:	When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.
Governmental Inventory Status	:	All components comply with TSCA, EINECS/ELINCS, AICS, METI, DSL, KECI, ENCS, PICCS and IECSC.
SARA		
U.S. Superfund Amendments and Reauthorization Act SARA Title III	:	This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".
SARA (311/312) Reportable Hazard Categories	:	None

The following product ingredients are cited on the lists below

Chemical name	CAS-No.	Concentration [%]	List Citations
Zinc alkyldithiophosphate	84605-29-8	< 2.00	

Regulatory List Searched

1 = ACGIH ALL	6 = IARC 1	11 = TSCA 4	17 = CA P65	22 = MI 293
2 = ACGIH A1	7 = IARC 2A	12 = TSCA 5a2	18 = CA RTK	23 = MN RTK
3 = ACGIH A2	8 = IARC 2B	13 = TSCA 5e	19 = FL RTK	24 = NJ RTK
4 = NTP CARC	9 = OSHA CARC	14 = TSCA 6	20 = IL RTK	25 = PA RTK
5 = NTP SUS	10 = OSHA Z	15 = TSCA 12b	21 = LA RTK	26 = RI RTK

Code Key: CARC = Carcinogen; SUS = Suspected Carcinogen

16. OTHER INFORMATION

Note: Engen products do not contain PCBs.

INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a doctor as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

Note: No significant changes have been made to this Safety Data Sheet since the previous date.

Disclaimer

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and we expressly disclaim all warranties of every kind and nature, including warranties of merchantability and fitness for a particular purpose in respect to the use or suitability of the product. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.