1. IDENTIFICATION OF THE SU Material Name Uses		TANCE/PREPARATION AND COMPANY/UNDERTAKING Shell Argina X 40 Engine oil.
Product Code	:	001B3359
Manufacturer/Supplier	:	Shell Pakistan Limited Shell House Clifton 6 Chaudhry Khaliquzzaman Road 75530 Karachi Pakistan
Telephone Fax	:	(+92) 2135689525 (+92) 2135684355
Emergency Telephone Number	:	(+92) 800 74355

2. COMPOSITION/INFORMATION ON INGREDIENTS

Preparation Description

: Highly refined mineral oils and additives.

Hazardous Components

Chemical Identity	CAS	EINECS	Symbol(s)	R-phrase(s)	Conc.
Calcium long chain alkyl salicylate				R52/53	1,00 - 10,00 %

Additional Information : The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346. Refer to chapter 16 for full text of EC R-phrases.

3. HAZARDS IDENTIFICATION		
EC Classification	:	Not classified as dangerous under EC criteria.
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.
Signs and Symptoms	:	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.
Safety Hazards		Not classified as flammable but will burn.
-		
Environmental Hazards	:	Not classified as dangerous for the environment.
4. FIRST AID MEASURES General Information	:	Not expected to be a health hazard when used under normal

	conditions.
Inhalation	 No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
Skin Contact	: Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
Eye Contact	 Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
Ingestion	 In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Advice to Physician	: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.
Suitable 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.
Protective Equipment 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.

Protective measures Clean Up Methods Additional Advice	 Avoid contact with skin and eyes. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or 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. Local authorities should be advised if significant spillages cannot be contained.
7. HANDLING AND STORAGE General Precautions Handling	 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. 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.
Storage	: Keep container tightly closed and in a cool, well-ventilated
	place. Use properly labelled and closeable containers. Storage
	Temperature: 0 - 50 °C / 32 - 122 °F
Recommended Materials	: For containers or container linings, use mild steel or high
	density polyethylene.
Unsuitable Materials	: PVC.
Additional Information	: Polyethylene containers should not be exposed to high
	temperatures because of possible risk of distortion.

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.

Occupational Exposure Limits

Material	Source	Туре	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA [Inhalable fraction.]		5 mg/m3	
Exposure Contro Personal Protect		depending upor based on a risk Appropriate me airborne concer mist formed, the concentrations Personal protect	n potential ex assessment asures includ ntrations. Wh ere is greater to be genera ctive equipme	of local circums of local circums de: Adequate ver ere material is h potential for airl ted. ent (PPE) should	ntilation to control eated, sprayed or porne meet
Equipment		recommended	national stan	dards. Check wi	th PPE suppliers.
Respiratory P Hand Protecti		conditions of us practices, preca material. If engi concentrations health, select re specific conditio Check with resp air-filtering resp combination of combined partic >65°C(149 °F)] Where hand co	ee. In accorda autions shoul neering contri to a level whi espiratory prote ons of use an piratory prote irators are su mask and filt culate/organic ntact with the	d be taken to av rols do not main ich is adequate to tection equipment d meeting relevant ctive equipment uitable, select an er. Select a filter c gases and vap	ndustrial hygiene oid breathing of tain airborne o protect worker ent suitable for the ant legislation. suppliers. Where appropriate suitable for ours [boiling point
		US: F739) mad suitable chemic gloves. Suitabil usage, e.g. free	e from the fo al protection ity and durab juency and d	llowing materials PVC, neoprene ility of a glove is uration of contac	or nitrile rubber dependent on

	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.
Eye Protection	: Wear safety glasses or full face shield if splashes are likely to occur.
Protective Clothing	: Skin protection not ordinarily required beyond standard issue work clothes.
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 Controls	: Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. PHYSICAL AND CHEMICAL	PR	OPERTIES
Appearance	:	Amber. Liquid at room temperature.
Odour	:	Slight hydrocarbon.
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	:	Typical 205 °C / 401 °F (PMCC / ASTM D93)
Upper / lower Flammability	:	Typical 1 - 10 %(V) (based on mineral oil)
or Explosion limits		
Auto-ignition temperature	:	> 320 °C / 608 °F
Vapour pressure	:	< 0,5 Pa at 20 °C / 68 °F (estimated value(s))
Density	:	Typical 916 kg/m3 at 15 °C / 59 °F
Water solubility	:	Negligible.
n-octanol/water partition	:	> 6 (based on information on similar products)
coefficient (log Pow)		
Kinematic viscosity	:	Typical 135 mm2/s at 40 °C / 104 °F
Vapour density (air=1)	:	> 1 (estimated value(s))
Evaporation rate (nBuAc=1)	:	Data not available
10. STABILITY AND REACTIVIT	Y	
Stability	:	Stable.
Conditions to Avoid	:	Extremes of temperature and direct sunlight.
Materials to Avoid	:	Strong oxidising agents.
Hazardous	:	Hazardous decomposition products are not expected to form
Decomposition Products		during normal storage.
11. TOXICOLOGICAL INFORM	٩T	
Basis for Assessment	:	Information given is based on data on the components and the toxicology of similar products.
Acute Oral Toxicity	:	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rat
Acute Dermal Toxicity	:	Expected to be of low toxicity: LD50 > 5000 mg/kg , Rabbit
Acute Inhalation Toxicity		Not considered to be an inhalation bazard under normal

		contact without proper cleaning can clog the pores of the skin
		resulting in disorders such as oil acne/folliculitis.
Eye Irritation	:	Expected to be slightly irritating.
Respiratory Irritation	:	Inhalation of vapours or mists may cause irritation.
Sensitisation	:	Not expected to be a skin sensitiser.
Repeated Dose Toxicity	:	Not expected to be a hazard.
Mutagenicity	:	Not considered a mutagenic hazard.
Carcinogenicity	:	Product contains mineral oils of types shown to be non- carcinogenic in animal skin-painting studies. Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC). Other components are not known to be associated with carcinogenic effects.
Reproductive and Developmental Toxicity	:	Not expected to be a hazard.
Additional Information	:	Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal. ALL used oil should be handled with caution and skin contact avoided as far as possible. Continuous contact with used engine oils has caused skin cancer in animal tests.

12. ECOLOGICAL INFORMATION

Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

Acute Toxicity	: Poorly soluble mixture. May cause physical fouling of aquatic organisms. Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l (to aquatic organisms) (LL/EL50 expressed as the nominal amount of product required to prepare aqueous test extract). Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.
Mobility	 Liquid under most environmental conditions. Floats on water. If it enters soil, it will adsorb to soil particles and will not be mobile.
Persistence/degradability	: 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.
Bioaccumulation	: Contains components with the potential to bioaccumulate.
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 CONSIDERATIO	DNS

Container Disposal	:	Dispose in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the
Local Legislation	:	collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

14. TRANSPORT INFORMATION

Land (as per ADR classification): Not regulated This material is not classified as dangerous under ADR regulations.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.

15. REGULATORY INFORMATION

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

EC Classification	:	Not classified as dangerous under EC criteria.
Chemical Inventory Status		-
EINECS	:	All components
		listed or polymer
		exempt.
TSCA	:	All components
		listed.

16. OTHER INFORMATION

R-phrase(s)

R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.		
MSDS Version	Number :	1.2	
MSDS Effectiv	e Date :	11/22/2010	
MSDS Revisio	ns :	A vertical bar () in the left margin indicates an amendment from the previous version.	
MSDS Distribu	ition :	The information in this document should be made available to all who may handle the product.	
Disclaimer	:	This information is based on our current knowledge and is 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.	

Shell Argina X 40 Version 1.2 Effective Date 11/22/2010

Material Safety Data Sheet