1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

Material Name : Shell Argina T 30

Uses : Engine oil.

Product Code : 001B3356

Manufacturer/Supplier : Shell India Markets Private Limited

2nd Floor, Campus 4A RMZ Millenia Park

143 Dr. MGR Road, Perungudi

CHENNAI 600096 India

**Telephone** : (+91) 04443450000 **Fax** : (+91) 04443451516

**Emergency Telephone** 

Number

: +91 22 6516 1058

2. COMPOSITION/INFORMATION ON INGREDIENTS

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

Additional Information : The highly refined mineral oil contains <3% (w/w) DMSO-

extract, according to IP346.

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

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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 may be evolved if incomplete combustion occurs. Unidentified organic and inorganic

compounds.

Suitable Extinguishing

Media

**Unsuitable Extinguishing** 

Media

**Protective Equipment for** 

**Firefighters** 

Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Do not use water in a jet.

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 : 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.

Clean Up Methods : 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.

Additional Advice : Local authorities should be advised if significant spillages

cannot be contained.

# 7. HANDLING AND STORAGE

General Precautions : Use local exhaust ventilation if there is risk of inhalation of

vapours, mists or aerosols. 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.

**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. Properly dispose of any contaminated rags or

cleaning materials in order to prevent fires.

Storage : Keep container tightly closed and in a cool, well-ventilated

place. Use properly labelled and closeable containers. Store at

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ambient temperature.

**Product Transfer** : This material has the potential to be a static accumulator.

Proper grounding and bonding procedures should be used

during all bulk transfer operations.

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	Type	ppm	mg/m3	Notation
Oil mist, mineral	ACGIH	TWA(Inhala		5 mg/m3	
		ble fraction.)		_	
	IN OEL	TWA(Mist.)		5 mg/m3	
	IN OEL	STEL(Mist.)		10 mg/m3	

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

No biological limit allocated.

**Exposure Controls**: 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.

Define procedures for safe handling and maintenance of controls. Educate and train workers in the hazards and control measures relevant to normal activities associated with this

product. Ensure appropriate selection, testing and

maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation. Drain down system prior to equipment break-in or maintenance. Retain drain downs in sealed storage pending disposal or for subsequent recycle. Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash

work clothing and protective equipment to remove

contaminants. Discard contaminated clothing and footwear that

cannot be cleaned. Practice good housekeeping.

Personal Protective : Personal protective equipment (PPE) should meet

### **Equipment**

recommended national standards. Check with PPE suppliers.

#### **Respiratory Protection**

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)].

#### **Hand Protection**

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, dexterity. Always 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.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognise that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time may be acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

**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. Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory. Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/ Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/ Health and Safety Executive (HSE), UK: Methods for the

**Determination of Hazardous Substances** 

http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen

Unfallversicherung (IFA), Germany. http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France

http://www.inrs.fr/accueil

**Environmental Exposure** Controls

Take appropriate measures to fulfil the requirements of relevant environmental protection legislation. Avoid

contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on

emission limits for volatile substances must be observed for the

discharge of exhaust air containing vapour.

: > 280 °C / 536 °F estimated value(s)

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Amber. Liquid at room temperature.

Odour Slight hydrocarbon. рΗ Not applicable.

Initial Boiling Point and

**Boiling Range** 

Pour point Typical -18 °C / 0 °F

Typical 212 °C / 414 °F (PMCC / ASTM D93) Flash point Upper / lower Flammability : Typical 1 - 10 %(V) (based on mineral oil)

or Explosion limits

: > 320 °C / 608 °F Auto-ignition temperature

Vapour pressure : < 0.5 Pa at 20 °C / 68 °F (estimated value(s))

Specific gravity : Typical 0.918 at 15 °C / 59 °F : Typical 918 kg/m3 at 15 °C / 59 °F Density

Water solubility : Negligible.

Solubility in other solvents : Data not available n-octanol/water partition : > 6 (based on information on similar products)

coefficient (log Pow)

Dvnamic viscosity : Data not available

Kinematic viscosity : Typical 110 mm2/s at 40 °C / 104 °F

: > 1 (estimated value(s)) Vapour density (air=1)

Electrical conductivity : This material is not expected to be a static accumulator.

Evaporation rate (nBuAc=1) : Data not available

### 10. STABILITY AND REACTIVITY

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.

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## 11. TOXICOLOGICAL INFORMATION

**Basis for Assessment** : Information given is based on data on the components and the

toxicology of similar products.

Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for

individual component(s).

**Acute Oral Toxicity Acute Dermal Toxicity Acute Inhalation Toxicity**  Expected to be of low toxicity: LD50 > 5000 mg/kg, Rat Expected to be of low toxicity: LD50 > 5000 mg/kg, Rabbit Not considered to be an inhalation hazard under normal

conditions of use.

Skin Irritation : Expected to be slightly irritating. Prolonged or repeated skin

contact without proper cleaning can clog the pores of the skin

resulting in disorders such as oil acne/folliculitis. Expected to be slightly irritating.

Inhalation of vapours or mists may cause irritation.

**Eye Irritation** 

**Respiratory Irritation** 

Sensitisation

Not expected to be a skin sensitiser.

**Repeated Dose Toxicity** 

Mutagenicity Carcinogenicity Not expected to be a hazard.

Not considered a mutagenic hazard.

Not expected to be carcinogenic. 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).

Material	:	Carcinogenicity Classification
Highly refined mineral oil (IP346 <3%)	:	ACGIH Group A4: Not classifiable as a human carcinogen.
Highly refined mineral oil (IP346 <3%)	:	IARC 3: Not classifiable as to carcinogenicity to humans.
Highly refined mineral oil (IP346 <3%)	:	GHS / CLP: No carcinogenicity classification

Reproductive and **Developmental Toxicity** Additional Information

: Not expected to be a hazard.

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. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

**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

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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.

Microorganisms

Data not available

**Mobility** Liquid under most environmental conditions. If it enters soil, it

will adsorb to soil particles and will not be mobile. Floats on

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. Contains components with the potential to bioaccumulate.

**Bioaccumulation** 

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

**Other Adverse Effects** 

**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.

Disposal should be in accordance with applicable regional, **Local Legislation** 

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

**Additional Information** : MARPOL Annex 1 rules apply for bulk shipments by sea.

#### 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.

No Hazard Symbol required EC Symbols

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EC Risk Phrases : Not classified. EC Safety Phrases : Not classified.

**Chemical Inventory Status** 

EINECS : All components

listed or polymer

exempt.

TSCA : All components

listed.

Other Information : The Manufacture, Storage and Import of Hazardous Chemicals

Rules 1989 (amended version issued 2000). The Factories Act, 1948, The Second Schedule: Permissible levels of certain chemical substances in work environment, as amended through 1987. India Central motor Vehicles (Amendment)

Rules 1993.

### 16. OTHER INFORMATION

R-phrase(s)

Not classified.

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SDS Effective Date : 02.08.2013

SDS Revisions : A vertical bar (|) in the left margin indicates an amendment

from the previous version.

**SDS Distribution** : 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.