

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT NAME	API GL-4 80W-90 GEAR OIL
CHEMICAL NAME	GEAR OIL
MANUFACTURER	Amara Raja Energy and Mobility Limited Renigunta-Cuddapah Rd, Karakambadi-517520, Tirupati, Andhra Pradesh India. Contact : 1800 425 5353 Email: amaronlubes@amararaja.com

2. Composition and Ingredients

Components	CAS No.	Range in %
Highly Refined Mineral base Oil	Proprietary	88-100
Additives which may include detergent –inhibitor, Pour point depressants ,Extreme pressure additive and/or antifoam agent: contains a maximum 10%(in the additive package)solvent dewaxed light paraffinic distillate base oil as a carrier fluid (CAS 64742-56-9)	Proprietary	0-12

3. Hazards Identification

Eyes	Expected to cause no more than minor eye irritation
Oral	Ingestion of this product and subsequent vomiting can result in aspiration into the lungs, causing chemical pneumonia and lung damage
Inhalation	Breathing the vapour or mist at concentrations in air that exceed the ACGIH TLV can cause respiratory irritation or discomfort
Skin	Expected to cause no more than minor skin irritation. Prolonged or frequently repeated contact may cause more severe irritation or may cause the skin to become cracked or dry from the defatting action of this material
Long Term Toxic Effects	The base oil component(s) are not expected to be carcinogenic.

4. First Aid Measures

Eyes	Flush eyes immediately with fresh water for several minutes while holding the eyelids open. If irritation persists, see a doctor
Skin	Wash skin thoroughly with soap and water. If skin irritation persists or a rash develops as a result of excessive contact, see a doctor. Launder contaminated clothing

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Ingestion	Do not induce vomiting. Aspiration of the material can cause serious lung injury such as chemical pneumonia. Call a doctor immediately. If spontaneous vomiting occurs, keep head below hips to prevent aspiration and monitor for breathing difficulty. Never give anything by mouth to an unconscious person.
Inhalation	If respiratory irritation or any signs or symptoms as described in this MSDS occur, mover the person to fresh air. If any of these effects continue, see a doctor
Advice to Doctor	This product may present an aspiration hazard. See related comments in this MSDS. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours

5. Fire Fighting Measures

Ignition Temperature, °C	Not determined
Flammable Limits (% by Volume)	Not determined
Flash Point, °C	More than 165°C (COC)
Fire Extinguishing Agents	According to the US National Fire Protection Association Guide, use water spray, dry chemical, foam or carbon dioxide. Water or foam may cause frothing. Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapours and to provide protection for personal attempting to stop the leak
Explosion Hazards	For fires involving this material, do not enter any enclosed or confined space without self-contained breathing apparatus to protect against the hazardous effects of combustion products or oxygen deficiency

6. Accidental Release Measures

In case of Spill	Stop the source of the leak or release and contain spill if possible. Ventilate the area. Use respirator and protective clothing as discussed in this MSDS. Cover spill with a generous amount of inert absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container. Prevent contamination of groundwater or surface water
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7. Handling and Storage

Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.
Misuse of empty containers can be hazardous. DO NOT cut, weld, heat or drill container. Residue may ignite with explosive violence if heated sufficiently. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

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8. Exposure Control/Personal Protection

Eyes	No special eye protection is usually necessary. Safety glasses, chemical type goggles, or face shield appropriate where splashing or misting is expected during routine operations or spill clean-up.
Skin	Exposed employees should exercise reasonable personal cleanliness; this includes cleansing exposed skin several times daily with soap and water and laundering or dry cleaning soiled work clothing at least daily.
Inhalation	Respiratory protection is normally not required. However, if operating conditions create airborne concentrations which exceed the recommended exposure standard(s), the use of an approved respirator is recommended. Wear approved respiratory protection such as toxic dust, mist and fume respirator
Ventilation	Use adequate ventilation to keep the airborne concentrations of this material below the ACGIH TLV for mineral oil mists. Local exhaust ventilation and/or enclosure of the processes is preferred in these cases
Exposure Limits	The ACGIH TLV for mineral oil mists is 5 mg/m ³ for a daily 8-hour exposure

9. Physical and Chemical Properties

Note: The following data may represent a range of approximate or typical values for products in the same family. Precise technical information is provided in Product Bulletins and can be obtained from your Marketing Representative.	
Appearance and Odor	Bright and Clear liquid, mild odor
Boiling Point	Not determined
Vapor Pr (mm HG @ 25 °C)	Not determined
Density(kg/l at 29.5 °C)	0.80-0.95
Vapor Density (Air=1)	Not determined
Undiluted product's pH	Not applicable
Solubility in Water	Negligible
Percent Volatile by Volume	Not determined
Evaporation	Not determined
Viscosity @100°C,cSt	13.5 – 15.0
Colour (ASTM D 1500),Typical	L 3.0
Pour Point ,°C,Max	(-)9

10. Stability and Reactivity

Hazardous Polymerizations	DO NOT OCCUR
Products of Combustion	Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustions products of nitrogen and sulfur
Conditions to Avoid	Strong oxidizers as chlorates, nitrates, peroxides etc

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11. Toxicological Information

General	Based on available toxicological information the oil produces no adverse effects on health when properly handled and used.No special precautions are suggested beyond attention to good personal hygiene including laundering any oil soaked clothing and washing contact area with soap and water.
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12. Ecological Information

Environmental Effects	This product is expected to have low aquatic toxicity and is not considered to represent a long-term danger to the aquatic environment. This material may present environmental risks common to oil spills
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13. Disposal Considerations

Waste Disposal	Place contaminated materials are disposable containers and dispose off in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material
Remarks	This material may present environmental risks common to oil spills. Contact your local oil spill response group and applicable government agencies if a spill occurs

14. Transport Information

Transportation of Dangerous	Not Applicable
UN Number	Not Applicable
Dangerous Goods Class	Not applicable
Hazchem Code	Not applicable
Additional Information	None Determined

15. Regulatory Information

Symbol (s)	None
R-Phrases (s)	R 52/53 Harmful to aquatic organisms ,may cause long term adverse effects in the aquatic environment
S Pharase (s)	S35: This material and its container must be disposed of in a safe way , S56: Dispose of this material and its container to hazardous or Special waste collection point S59:Refer to manufacturer /Supplier for information on recovery /recycling

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16. Other Information — No specific notes on this product.

Note: The above data is based on the information presently available to us. The data provided is without any warranty, express or implied, regarding its reactions and accuracy. It is the user's responsibility to determine safe conditions for use of this product and to assure liability for loss, injury, damage or expense resulting from improper use of this product.