1. PRODUCT AND COMPANY IDENTIFICATION:

| PRODUCT NAME | API SN 20W-40 JASO MA2 MCO |
|---------------|--|
| CHEMICAL NAME | ENGINE OIL |
| MANUFACTURER | Amara Raja Energy and Mobility Limited |
| | Renigunta-Cuddapah Rd, Karakambadi-517520, Tirupati, Andhra Pradesh India. |
| | <u>Contact : 1800 425 5353</u> |
| | Email: amaronlubes@amararaja.com |

2. Composition and Ingredients

| Components | CAS No. | Range in % |
|---|-------------|------------|
| Solvent Dewaxed Heavy paraffinic Distillate | PROPERITORY | >82 |
| Additives which may include detergent -inhibitor, Pour point | PROPERITORY | 0-18 |
| depressants ,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) | | |

3. Hazards Identification

| Main hazards | Not a dangerous preparation according to 1999/45/EC | |
|-----------------|--|--|
| Adverse human | None under normal conditions | |
| health effects | | |
| Environmental | No specific risk for the environment | |
| hazards | | |
| 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 | The base oil component(s) are not expected to be carcinogenic. | |
| Effects | | |



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 |
| 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 | This product may present an aspiration hazard. See related comments in this MSDS. If |
| Doctor | 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

| Suitable extinguishers | Water fog. Carbon dioxide .Dry chemical. Foam |
|------------------------------|--|
| Extinguishers not to be used | Do not use a heavy water stream |
| Surrounding fires | Use water spray or fog for cooling exposed containers |
| Special exposure hazards | None under normal conditions |
| Protection against fire | None under normal conditions. See also hazardous reactions |
| Special procedures | None identified |

6. Accidental Release Measures

| Personal | Keep public away from danger area. Wear recommended personal protective |
|-----------------|---|
| Precautions | equipment. Equip cleanup crew with proper protection |
| Environmental | Prevent entry to sewers and public waters. Notify authorities if liquid enters |
| precautions | sewers or public waters. |
| After spillage | Sweep or shovel spills into appropriate container for disposal. Cover spills area |
| and/or leakage | with oil adsorbent. Spill area may be slippery. |
| After spillage | May require excavation of contaminated soil |
| and/or | |
| leakage-on soil | |



7. Handling and Storage

| General | No naked lights. No smoking. Direct sunlight and heat sources to be avoided. Keep |
|----------------|---|
| | away from sources of ignition. |
| Precautions in | Handle in accordance with good industrial hygiene and safety procedures. |
| handling and | |
| storage | |
| Storage | Keep container closed when not in use. Keep only in the original container in a |
| | cool, well-ventilated place. Keep at temperature not exceeding 45°C. |
| Handling | Wash hands and other exposed areas with mild soap and water before eat, drink |
| | or smoke and when leaving work. |

8. Exposure Control/Personal Protection

| Respiratory | No special respiratory protection equipment is recommended under normal |
|--------------------|--|
| Protection | conditions of use with adequate ventilation |
| Hand Protection | Use neoprene or rubber gloves |
| Eyes | Safety glasses |
| Skin | No special clothing/skin protection equipment is recommended under normal conditions of use. In case of possible repeated skin contact wear protective clothing |
| Industrial Hygiene | Provide local exhaust or general room ventilation to minimize dust and/or vapor concentrations. When using, do not eat, drink or smoke. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure |
| Occupational | None established |
| Exposure Limits | |

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.

| your Marketing Representative. | |
|--------------------------------|---------------------|
| Physical state | Amber colour Liquid |
| Boiling Point | Not determined |
| Odour | Mild |
| Pour Point,°C | (-)21 Max. |
| Viscosity @100°C,cSt | 13.5–15.50 |
| Flash Point,°C,Min. | 200 |
| Density(kg/l at 15 °C) | 0.881 Typical |



10. Stability and Reactivity

| Physico-chemical stability | Stable |
|----------------------------|---|
| Conditions to avoid | Open flame. Direct Sunlight. Overheating. |
| Material to Avoid | Oxidizing |
| Hazardous decomposition | Carbon dioxide. Carbon Monoxide, Hydrogen Sulfide |
| Products | |
| Hazardous reactions | None Under normal conditions |
| Hazardous Polymerization | Will not occur |

11. Toxicological Information

| U | |
|-----------------|--|
| Acute toxicity | Not expected to be toxic |
| Inhalation | Practically non-toxic at normal conditions of usage. May cause respiratory irritation following prolonged or repeated inhalation of excessive oil mist and vapors. |
| Dermal | Not expected to be a primary skin irritant. Prolonged or repeated exposure may lead to dermatitis. |
| Ingestion | Practically non-toxic if ingested in small doses. Larger quantities may cause nausea and diarrhoea |
| Sensitization | No sensization effects known |
| Carcinogenicity | No data available. |
| Mutagenicity | Not expected to be mutagenic hazard |

12. Ecological Information

| Environmental Effects | Adverse effects to the environment are not expected from this product |
|----------------------------|---|
| Bio accumulative Potential | Not determined |
| Mobility soil | Ground water contamination may be caused through spillages |

13. Disposal Considerations

| Waste Disposal | Dispose in safe manner in accordance with local/national regulations |
|----------------|--|
| | |



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

| Symbols(S) | Not classified |
|---------------|----------------|
| R phrases(s) | Not Classified |
| S Phrases (s) | Not classified |

16. Other Information —

Product Information – For specific or detailed technical data for this product ,please contact your local sales representative

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.