

# Material Safety Data Sheet(MSDS)

## 1. Chemical & Company Identification

|                      |                       |  |              |       |
|----------------------|-----------------------|--|--------------|-------|
| Trade Name           | GEARTEC GL5 80W/90(E) |  | Product Code | L5215 |
| Supplier             | Name                  | GS Caltex Corporation                                    |              |       |
|                      | Address               | GS Tower, Yoksam-dong, Kangnam-gu, Seoul, 135-985, Korea |              |       |
|                      | Routine Inquiries     | 82-2-2005-6841~5   |              |       |
|                      | Fax                   | 82-2-565-5156  |              |       |
| Chemical Description | Lubricating Oil       |  |              |       |

## 2. Hazards Identification

|                        |   |
|------------------------|---|
| Warning Statements     | NO SIGNIFICANT HAZARD.  |
| Eyes                   | Expected to cause no more than minor eye irritation characterized by tearing or a burning sensation.  |
| Oral                   | If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.   |
| Inhalation             | Breathing the vapour or mist may cause respiratory irritation, discomfort, or other pulmonary effects.  |
| Skin                   | Not expected to be irritating following short-term contact.<br>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 effect | The base oil component(s) are not expected to be carcinogenic based on IARC criteria.<br>This product has not been tested as a whole for chronic health effects.<br>See Section 11 for additional information.                      |

## 3. Composition & Ingredients

| Components  | CAS No.       | Range in % |
|---|---------------|------------|
| Severely Hydrotreated Heavy Paraffinic Distillate   | 64742-54-.7   | 85-97      |
| Additives which may include detergent-inhibitor, viscosity index improver, pour point depressant, or antifoam agent | Not Available | 3-15       |

## 4. First Aid Measures

|            |   |
|------------|---|
| Eyes       | Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open.<br>If irritation persists, see a doctor.                                      |
| Skin       | Wash skin thoroughly with soap and water.<br>If skin irritation persists or a rash develops as a result of excessive contact, see a doctor.<br>Launder contaminated clothing. |
| Inhalation | If respiratory irritation or any signs or symptoms as described in this MSDS occur, move the person to fresh air. If any of these effects continue, see a doctor.             |
|            | If swallowed and person is conscious, give water or milk. DO NOT make person vomit.   |

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| <b>Ingestion</b>        | If swallowed and person is conscious, give water or milk. DO NOT make person vomit except on advice of medical personnel. If advice cannot be obtained, take person with container and label to nearest emergency treatment center. Never give anything by mouth to an unconscious person. |
| <b>Advice to doctor</b> | None Applicable.   |

## 5. Fire Fighting Measures

|                                       |   |
|---------------------------------------|---|
| <b>Ignition temp. (Degrees C)</b>     | Not Determined  |
| <b>Flammable limits (% by volume)</b> | Not Determined  |
| <b>Flash point (Degrees C)</b>        | 222(COC)  |
| <b>Fire extinguishing agents</b>      | According to the U.S. National Fire Protection Association Guide, use water fog, 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 persons attempting to stop the leak. |
| <b>Explosion hazards</b>              | 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

|                         |  |
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| <b>In case of spill</b> | Stop the source of the leak or release and contain spill if possible. Ventilate 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 & Storage

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| <b>General</b> | Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimised. 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

|                   |  |
|-------------------|--|
| <b>Eyes</b>       | 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.  |
| <b>Skin</b>       | 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 weekly.  |
| <b>Inhalation</b> | 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 a toxic dust, mist and fume respirator. |

|                        |   |
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|                        | and full respirator.  |
| <b>Ventilation</b>     | 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 process is preferred in these cases. |
| <b>Exposure limits</b> | The ACGIH TLV for mineral oil mists is 5 mg/m <sup>3</sup> for a daily 8-hour exposure.<br>A short term exposure limit (STEL) of 10 mg/m <sup>3</sup> is recommended.   |

## 9. Physical & Chemical Properties

|                              |                |                          |                     |
|------------------------------|----------------|--------------------------|---------------------|
| <b>Appearance</b>            | Clear Liquid   | <b>Odor</b>              | Mild Petroleum Odor |
| <b>pH</b>                    | Not Applicable | <b>Solubility(water)</b> | Negligible          |
| <b>Boiling point(deg. C)</b> | Not Determined | <b>Evaporation</b>       | Not Determined      |
| <b>Vapor pr.(mmHg)</b>       | Not Determined | <b>Density</b>           | 0.8766 kg/L @15°C   |
| <b>Vapor density(air=1)</b>  | Not Determined | <b>Viscosity</b>         | 14.68 cSt @100°C    |

## 10. Stability & Reactivity

|                                  |  |
|----------------------------------|--|
| <b>Hazardous Polymerizations</b> | DO NOT OCCUR   |
| <b>Products of combustion</b>    | Carbon monoxide, carbon dioxide, and aldehydes and ketones, combustion products of nitrogen or sulfur. |
| <b>Conditions to avoid</b>       | Strong oxidizers such as chlorates, nitrates, peroxides, etc.  |

## 11. Toxicological Information

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|----------------|---|
| <b>General</b> | This product contains petroleum base oils which may be refined by various processes including severe solvent extraction, hydrocracking and hydrotreating. These oils have not been listed in the U.S. National Toxicology Program (NTP) Annual Report nor have they been classified by the International Agency for Research on Cancer (IARC) as carcinogenic or probably carcinogenic to humans. |
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## 12. Ecological Information

|                              |  |
|------------------------------|--|
| <b>Environmental effects</b> | No specific ecotoxicity data on this product are available.<br>This material may present environmental risks common to oil spills. |
|------------------------------|--|

## 13. Disposal Considerations

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| <b>Waste disposal</b> | Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material. |
| <b>Remarks</b>        | 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

|                  |                |
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| <b>UN Number</b> | Not Applicable |
|------------------|----------------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Dangerous Goods Class</b>      | Not Applicable  |
| <b>Proper Shipping Name</b>       | Not Applicable  |
| <b>Hazchem Code(Australia/NZ)</b> | Not Applicable  |
| <b>Additional Information</b>     | None Determined |

## 15. Regulatory Information

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| <b>Respirator Information</b> | In the absence of local approved authorities, follow U.S. NIOSH/MSHA, U.K. BSI, or joint Australia-New Zealand AS/NZS 1715/1716. Respirators must follow AS/NZS 1715/1716 standard for approved respirators. |
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## 16. Other Information

To the best of our knowledge, the information provided in this MSDS document is correct. Access to this information is being provided via the Internet so that it can be made available to as many potential users as possible. We do not assume any liability for consequences of the use of this information since it may be applied under conditions beyond our control or knowledge. Also, it is possible that additional data could be made available after this MSDS was issued. Certain hazards are described herein, however these may not be the only hazards that exist. All materials may present unknown hazards and should be used with caution. Customers are encouraged to review this information, follow precautions, and comply with all applicable laws and regulations regarding the use and disposal of this product. For specific technical data or advice concerning this product as supplied in your country please contact your local sales representative. The final determination of the suitability of any material is the sole responsibility of the user.