

LIST OF ABRIVATIONS

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|-------------------------|---|
| HL | Hydrodynamic lubrication. |
| EHL or EHD | Elastohydrodynamic lubrication |
| VI | Viscosity index. |
| SAE | Society American Engineering. |
| PMA_s | Polymethacrylates. |
| OCP_s | Olefin copolymers. |
| HSD | Hydrogenated poly styrene-co-butadiene. |
| SIP | Hydrogenated poly styrene-co-isoprene. |
| SPE | Styrene polyester. |
| ZDDP_s | Zinc dithiophosphates. |
| CHP | Cumene hydroperoxide. |
| BPO | Benzoyl peroxide. |
| AIBN | Azo bisisobutyro nitrile. |

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| PTSA | p.Toluene sulphonic acid monohydrate. |
| I.R.Spectrum | Infra red spectrum. |
| F.T.I.R. | Spectrometer Model Type Mattson Infinity Series Top 961. |
| GPC | Gel permeation chromatography. |
| ASTMD | American Society of Testing and Materials. |
| (CFPPA-T) | Cold Filter Plugging Point Automatic Tester. |
| ¹HNMR | Nuclear magnetic resonance of hydrogen atom. |
| PP | Pour Point. |
| A | Prepared compound of styrene-maleic anhydride copolymer with dodecyl alcohol. |
| B | Prepared compound of styrene-maleic anhydride copolymer with hexadecyl alcohol. |
| C | Prepared compound of styrene- |

maleic anhydride copolymer with octadecyl alcohol.

D Prepared compound of styrene-maleic anhydride copolymer with docosanol.

E Prepared compound of styrene-maleic anhydride copolymer with dodecyl amine.

F Prepared compound of styrene-maleic anhydride copolymer with hexadecyl amine.

G Prepared compound of styrene-maleic anhydride copolymer with octadecyl amine.

L Prepared compound of octadecene-maleic anhydride copolymer with dodecyl alcohol .

M Prepared compound of octadecene-maleic anhydride copolymer with hexadecyl alcohol.

- N** Prepared compound of octadecene-maleic anhydride copolymer with octadecyl alcohol.
- O** Prepared compound of octadecene-maleic anhydride copolymer with docosanol .
- R** Prepared compound of octadecene-maleic anhydride copolymer with dodecyl amine.
- S** Prepared compound of octadecene-maleic anhydride copolymer with hexadecyl amine.
- T** Prepared compound of octadecene-maleic anhydride copolymer with octadecyl amine.

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