

FORM 2

THE PATENTS ACT, 1970
(39 of 1970)
AND
THE PATENTS RULES, 2003

**COMPLETE
SPECIFICATION**

(See Section 10; rule 13)

TITLE OF THE INVENTION

“ELASTOMER COMPOSITIONS COMPRISING GAS-TO-LIQUID BASE OILS AND
PROCESSES FOR PREPARATION THEREOF”

APPLICANT

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The following specification particularly describes
the invention and the manner in which
it is to be performed

C L A I M S

1. An elastomer composition comprising a gas-to-liquid (GTL) derived synthetic base oil as an extender oil, wherein the base oil has not been subjected to a process for the removal of haze components.
2. The elastomer of claim 1, wherein base oil comprises a Fischer Tropsch reaction synthesis product.
3. The elastomer of claims 1 or 2 comprising at least one elastomer component, and a base oil, wherein the base oil has not been treated to remove haze components and is present in the range of from about 0.1 wt% to about 50 wt% based on the weight of the total elastomer composition.
4. The elastomer of any of claims 1 to 3, wherein the elastomer is a rubber.
5. An elastomer composition comprising:
 - a) at least one elastomer, elastomer component, or mixtures thereof,
 - b) an extender oil comprising a GTL-derived base oil that includes a microcrystalline wax content, the extender oil present in the range of from at least about 0.1 wt% to at most about 50 wt% based on the weight of the elastomer composition, and optionally at least one further component selected from:
 - c) reinforcing agents,
 - d) cross-linking agents and/or cross-linking auxiliaries, e) inorganic fillers, and
 - e) waxes and/or antioxidants.
6. The elastomer of claims 1 to 5, wherein the elastomer comprises a thermoplastic elastomer (TPE).
7. The elastomer of claim 6, wherein the TPE is

selected from the group consisting of styrenic block copolymers, polyolefin blends, an elastomeric alloy, thermoplastic polyurethanes, thermoplastic copolyester and thermoplastic polyamides.

5 8. The elastomer of claims 1 to 5, wherein the elastomer comprises one or more of the group selected from natural rubber (NR); isoprene rubber or polyisoprene (IR); styrene-butadiene-rubber (SBR); butadiene rubber (BR); butylene rubber (IIR); an
10 ethylene-propylene diene rubber monomer (EPDM); ethylene-propylene rubber (EPM); nitrile butadiene rubber (NBR); and chloroprene rubber (CR).

9. The elastomer of claim 8, wherein the elastomer comprises a co-polymer.

15 10. The elastomer any of claims 5 to 9, wherein the base oil includes a paraffinic wax content of between 0.001 wt% and 5 wt%.

11. Use of a GTL-derived base oil that includes a paraffinic wax content as an extender oil in the
20 manufacture of an elastomer composition.

12. The use of claim 11, wherein the microcrystalline wax content is between at least 0.001 wt% and at most 5 wt%.

13. A process for the manufacture of an elastomer
25 composition comprising combining at least one elastomer, elastomer component, or a mixture thereof with an extender oil, the extender oil comprising a GTL-derived base oil that includes a paraffinic wax content sufficient to render the appearance of the GTL-derived
30 base oil as hazy at ambient temperature, the extender oil present in the range of from at least about 0.1 wt% to at most about 50 wt% based on the total weight of the elastomer composition.

14. The process of claim 13, wherein the, and wherein the base oil includes a microcrystalline wax content is of between at least 0.001 wt% and at most 5 wt% of the total weight of the GTL-derived base oil.

- 5 15. A process for the manufacture of an elastomer product comprising obtaining an elastomer composition according to the process of claims 13 and 14, and forming a product from the elastomer composition.

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