WHAT IS CLAIMED IS:

1. A process for preparing an alkylaryl sulfonate comprising

(a) reacting at least one meta-xylene compound with olefin or a mixture of olefins having from about 10 to about 20 carbon atoms, in the presence of an acid catalyst, wherein the resulting product comprises no more than 40 weight percent of 1-alkyl- 2, 4 dimethylsubstituted aromatic compound and at least about 60 weight percent of 1-alkyl- 3, 5 dimethyl substituted aromatic compound;

(b) sulfonating the product of (a); and

(c) neutralizing the product of (b) with a source of alkali or alkaline earth metal or ammonia.

2. The process according to Claim 1 wherein the source of alkali or alkaline earth metal is hydroxide.

3. The process according to Claim 1 wherein sulfonating the product occurs when the product of ~~(b)~~(a) is reacted with sulfur trioxide which has been diluted with air.

4. The process according to Claim 1 wherein the olefin or the mixture of olefins in step (a) is a mixture of linear olefins, a mixture of isomerized linear olefins, a mixture of branched olefins, a mixture of partially branched olefins, or a mixture thereof.

5. The process according to Claim 4 wherein the olefin or the mixture of olefins in step (a) is a mixture of linear olefins.

6. The process according to Claim 5 wherein the mixture of linear olefins is a mixture of normal alpha olefins.

7. The process according to Claim 6 wherein the mixture of linear olefins comprises olefins derived through cracking of petroleum wax or Fischer Tropsch wax.

8. The process according to Claim 4 wherein the olefin or the mixture of olefins is selected from olefins containing from about 12 carbon atoms to about 18 carbon atoms.

9. The process according to Claim 4 wherein the olefin or the mixture of olefins is a mixture of olefins derived from linear alpha olefins or isomerized linear olefins containing from about 12 to about 18 carbon atoms.

10. The process according to Claim 5 wherein the mixture of linear olefins is a mixture of linear internal olefins which have been derived from olefin metathesis.

11. The process according to Claim 1 wherein the mixture of olefins is a mixture of branched olefins.

12. The process according to Claim 11 wherein the mixture of branched olefins comprises polyolefin compounds derived from C_3 or higher monoolefins.

13. The process according to Claim 12 wherein the polyolefin compound is either polypropylene or polybutylene.

14. The process according to Claim 13 wherein the polyolefin compound is polypropylene.

15. The process according to Claim ~~14~~ 13 wherein the polyolefin compound is polybutylene.

16. The process according to Claim 1 wherein the acid catalyst is selected from Bronsted or Lewis acids.

17. The process according to Claim 16 wherein the acid catalyst is selected from the group consisting of aluminum trichloride, aluminum tribromide, hydrochloric acid, hydrofluoric acid, hydrobromic acid, sulfuric acid, perchloric acid, trifluoromethanesulfonic acid, fluorosulfonic acid, and nitric acid.

18. The process according to Claim 1 wherein the resulting product comprises no more than 25 weight percent of 1-alkyl -2, 4 dimethylsubstituted aromatic compound and at least about 75 weight percent of 1-alkyl - 3, 5 dimethyl substituted aromatic compound.

19. The process according to Claim 18 wherein the resulting product comprises no more than 10 weight percent of 1-alkyl -2, 4 dimethylsubstituted aromatic compound and at least about 90 weight percent of 1-alkyl - 3, 5 dimethyl substituted aromatic compound.

20. An alkylaryl sulfonate ~~compound~~ prepared by the process according to Claim 1.

21. A method of recovering crude oil from a subterranean hydrocarbon containing formation which comprises

(a) reacting at least one meta-xylene compound with an olefin or a mixture of olefins having from about 10 to about 20 carbon atoms, in the presence of an acid catalyst, wherein the resulting product comprises no more than 40 weight percent of 1-alkyl- 2, 4 dimethylsubstituted aromatic compound and at least about 60 weight percent of 1-alkyl- 3, 5 dimethyl substituted aromatic compound;

(b) sulfonating the product of (a);

(c) neutralizing the product of (b) with a source of alkali or alkaline earth metal or ammonia; and

(d) displacing said solution into the formation to recover hydrocarbons from a production well.