

WHAT IS CLAIMED IS:

1. A method for removing impurities from an organic solvent, comprising:
passing the organic solvent through at least one column comprising an adsorbent
5 to remove water in the organic solvent,
passing the organic solvent through a first filter unit, wherein the first filter unit
comprises a first housing and at least one first filter in the first housing, and the at least
one first filter comprises a filtration medium; and
distilling the organic solvent in a distillation column to obtain a purified organic
10 solvent;
wherein the first filter unit is between the distillation column and the at least one
column comprising the adsorbent.
2. The method of claim 1, wherein the organic solvent comprises an alcohol.
15
3. The method of claim 1, wherein the organic solvent comprises isopropyl
alcohol.
4. The method of claim 1, wherein the adsorbent comprises a molecular
20 sieve, a silica gel, activated alumina, activated carbon or an ion exchange resin.
5. The method of claim 1, wherein the filtration medium in the at least one
first filter comprises a polyolefin, a polyamide, a fluoropolymer, or a copolymer thereof.
- 25 6. The method of claim 1, wherein the filtration medium in the at least one
first filter comprises high density polyethylene or polytetrafluoroethylene.
7. The method of claim 1, wherein the filtration medium in the at least one
first filter has an average pore size from about 0.1 μm to 0.25 μm .
30

8. The method of claim 1, wherein the first filter unit comprises two to five first filters.

9. The method of claim 8, wherein the first filters are connected in parallel.

5

10. The method of claim 1, wherein the at least one first filter is a particle removal filter.

11. The method of claim 1, further comprising recirculating the organic solvent before distilling the organic solvent in the distillation column.

10

12. The method of claim 11, wherein the recirculating comprises moving the organic solvent exiting the first filter unit to the at least one column comprising an adsorbent and subsequently passing the organic solvent through the at least one column comprising an adsorbent and the first filter unit.

15

13. The method of claim 1, further comprising passing the organic solvent through a second filter unit downstream of the distillation column, wherein the second filter unit comprises a second housing and at least one second filter in the second housing, and the at least one second filter comprises a filtration medium.

20

14. The method of claim 1, further comprising moving the purified solvent to a packaging station.

15. The method of claim 1, wherein the purified organic solvent has a purity of at least about 99.99%.

25

16. The method of claim 1, wherein the purified organic solvent has a moisture content of at most about 100 ppm.

30

17. A system, comprising:
- at least one column comprising an adsorbent,
 - a first filter unit downstream of and in fluid communication with the at least one column comprising an adsorbent, wherein the first filter unit comprises a first housing
 - 5 and at least one first filter in the first housing, and the first filter comprises a filtration medium; and
 - a distillation column downstream of and in fluid communication with the first filter unit.