CARBON CHEMISTRY.

SUGGESTED USE FOR ZEOCLEAR™ GRANULAR MEDIA



Scope: Inline filtration (color remediation) with granular media as an adsorbent after oil extraction with liquid compressed hydrocarbon solvent.

Safety Precautions: Granular media contains fine particulate and proper respiratory protective measures should always be used.

Further information on storage conditions: Keep container tightly closed and dry; store in a cool, dry location.

REQUIRED MATERIALS:

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Filter housing - Stainless column 3"- 4" in diameter and 3"-12" in length depending on batch size.



Filter paper - 1-micron and 5-micron filter paper and/or sintered disc (depth filtration can be used to achieve sub-micron filtration without affecting flow.)

MEDIA TO BIOMASS RATIOS:



1:6 (75g per lb of plant material) Polish – light touch for best material



1:4 (112g per lb of plant material) Refine - medium load for product improvement

1:3 (150g per lb of plant material) Transform - more aggressive contaminant removal

Media Prep: Media does not need to be baked prior to use but can be and only superficial water will be removed which may improve performance. To remove superficial moisture, bake for 8hrs at 200C (392F)

Suggested solvent temperature: Works well with cold, ambient and warm solvent.

Suggested solvent flow rates:

Keep solvent flow into the filter just higher than that of your solvent recovery rate so that you have the slowest possible flow without completely recovering all the solvent in your recovery at any given time.

Suggested flow rate 1-2 Liters per minute (LPM) (≈1.5lb-3lb per minute)

Solution flowing through filter > Solvent recovery (evaporation)

Ball valves at the top and bottom of the media column can be closed partially to control flow. If both valves are left open and the solvent is allowed to flow freely the retention time will be too low and you will not achieve your desired results.

• Example: If you're recovering 1 LPM try to restrict flow to 1.1 LPM so that you have the slowest possible flow.