

## FILTRATION 101

# SILICA60

## HOW IT WORKS

Silica60 works by separating a mixture of chemical substances to its individual components. This creates a window where the pigments are more readily available to the bleaching clays

### Most Common Used In...

Material that has been stored in a hot environment which has likely decarboxylated a majority of the acidic compounds.

#### THE LIPID LAYER

The lipid layer will have most of your contaminate and oxidized compounds. Bleaching clays alone have difficulty removing all the pigmentation and contaminate form the lipid layer



#### BOOST BLEACHING EFFICIENCY

By separating the lipids from the pigments, the clays can bleach much more efficiently to reduce the total amount of clay dosage required.



#### REMOVE HEAVY METALS

Silica60 is also great for removing other contaminate such as heavy metals.



### WHY USE SILICA60

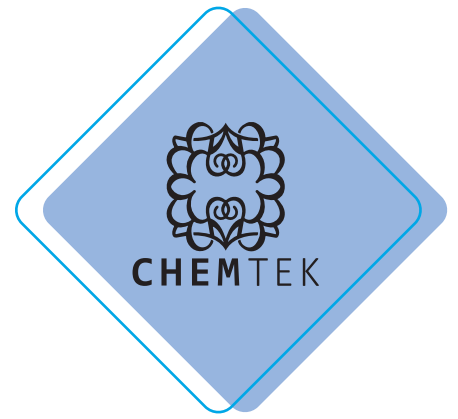
- To improve the clarity
- To improve the bleaching efficiency
- To remove heavy metals



<-- terpene layer

<-- acidic compounds layer

<-- delta9 lipid layer



Here you can see the majority of the oxidized compounds and pigments are homogenized with the delta9 lipid layer.



Material that has been decarboxylated will have a lipid(d9) layer which will be mixed with other pigments, oxidized compounds, and other contaminants. This lipid can make it difficult to remove the pigment out of the mixture.



Silica60 should always be used as the upper layer. This way it can break down the incoming solution into its individual components.



Silica60 will separate the lipid from the other components as it passes through.



The pigments enter the bleaching clay without any lipids in the way. This allows the clay to bleach much more efficiently.



The lipid(d9) layer continues through. It will require more solvent to flush completely through the silica60.



Silica60 has a longer retention time for lipid type compounds which will require additional solvent to successfully flush all the lipid layer through. Silica's main use in our application is simply to separate the components, not necessarily adsorb them.

<-- Oil retention. (not enough solvent)

