# Scum Decomposition

Vegetable fats (oils and fats) used in food factories and kitchens are mostly unsaturated fatty acids.

On the other hand, Sodium Hypochlorite Water infused with Sodium Hypochlorite is

$NaC\ell O + H_2O$ will change to $NaOH + HC\ell O$

further reaction

$HC\ell O \rightarrow HC\ell + [O]$

Nascent Oxygen (has strong Oxidizing properties)

and [O] (Nascent oxygen) generated here acts as a powerful oxidant.

Meanwhile, fats and oils (unsaturated fats) are hydrolyzed by oxidation etc.

Unsaturated fat $\xrightarrow{\text{Hydrolysis}}$ $C_nH_{2n+1}COOH$ (**Fatty acid**)+ $CH_2OH$ ($CH_2OH$ (**Glycerin**) $CH_2OH$)

Breaks down into Fatty Acids and Glycerin.

Glycerin is a typical trihydric alcohol, which is soluble in water.
In addition, Fatty Acids are insoluble in water as they are, but the [O] (Nascent Oxygen) produced by the catalytic reaction of Mechacera has a strong oxidizing action, and most of the Fatty Acids are converted into propionoid. It changes to aldehyde ($C_2H_5CHO$).

Propionic acid and Ppropionaldehyde are water-soluble chemicals.
Furthermore, by repeating the oxidation reaction, propionic acid and propionaldehyde change to acetic acid ($CH_3COOH$) or acetaldehyde ($CH_3CHO$), and further oxidation changes to $CO_2$ (carbon dioxide gas) and $H_2O$ (water).

Under normal conditions, Fat and Water do not get along well and exist separately, but when they react with the above-mentioned "Mechacera Water", they become soluble in water, decomposing Fat (oil) and Scum.

**SGM INC.**