

PURE CHEM PRODUCTS PVT LTD SCPW-TDS Technical Literature & Product Specification of

SCPW

SCPW (wax Sulphochloride) is normally made out by Sulphochlorinated process of n-paraffin of high carbon chain (or) fully refined Paraffin Wax with Carbon Chain of C_{21} to C_{40} and Oil content of less than 0.5%. Wide range of SCPW could be made by controlling the degree of Sulphochlorination.

Different grades of SCPW depending upon the Sulphur content and Specific Gravity is as follows.

SCPW Proper	Sulphur Content		
	SCPW- 3%	SCPW 3 to 4.5% (chlorofin 3020)	SCPW 4.5 to6.5%(LG)
Physical appearance	Oily liquid	viscous liquid	High viscous liquid
Specific Gravity	1.05-1.08	1.05 to 1.09	1.07 to 1.12
Chlorine content	24 to 25%	25 to 28%	28 to 32%
Hydrolysable Chlorine	3.0 to 3.3%	4 to 5%	5.6 to 7.1%
Sulphur content	2.7 to 3.0%	4.25 to 4.75%	5.2 to 6.7%
Viscosity at 25°C by brook Field Viscometer in cps (Centipoise)	180 to 250	400 to 550	800 to 1100

Applications of SCPW:

The major application of SCPW is basic rawmaterial in the manufacturing of Synthetic Fat Liquor used in the leather tanning process. Since SCPW is water insoluble oil, it needs to be saponified with Caustic Soda (NaOH) and further emulsified with suitable emulsifier to make it water soluble product.

Secondary Allcane Sulphonates (SAS) is produced by saponification of SCPW with Caustic Soda.

SCPW in leather tanning application :

SCPW is used also as tanning agents but in the majority of cases are subjected to a saponification reaction with a base and subsequently used as emulsifiable synthetic greasing agents for leather and hides.

The SCPW which from a chemical point of view present themselves totally or in part with $R-SO_2CI$ formula, by neutralization with alkalis react to give a product emulsifiable following reaction schemes respectively Caustic Soda, Ammonia, Monoethanolamine.

ADVANTAGES OF USING SCPW:

In the tanning sector the synthetic fatliquors containing SCPW are odorless, stable on oxidation and in light and having polar affinity for the hides they do not migrate with time and therefore the phenomena of "reposes" and white stains are avoided. Furthermore with SCPW fatliquors are qualitatively constant and economically advantageous.

SCPW has an important role to play in leather fat liquor preparation. It acts as a lubricant that confers a full, supple handle and good tensile and tear strengths on the leather after tanning. Fats such as fish and whale oil, hardened linseed oil, castor oil, aerated colza oil, cotton seed oil etc. which are commonly used for the manufactured of Fat Liquor, have the disadvantage that they become resinous and hence lose their effectiveness. Further, the waterproofing and flexing resistance of such additives is less than that with fatliquors made out from SCPW

Emulsified Chloroffins fatliquors are compatible with natural vegetable oil fatliquors so it can be used in combination with sulphited vegetable oil fatliquors to make semi synthetic fatliquors which can produce desired results.

Saponified SCPW can be considered as a synthetic substitute of sperm oil.

Apart from saponification products of SCPW it can also be used as substitute in the formulation the neat's - foot oil; they are particularly suitable for superficial greasing. By using SCPW it is possible to obtain depth greasing agents.

