

Sustainable Ready Made paste for Discharge Printing

Sustainable, Acrylate free, Water based Ready made print paste for White & Clear Discharge printing





What's the problem with old chemistries?

Right now, Many Ready Made print pastes offered are based on Solvents, release formaldehyde & are highly dependent on petrochemical based additives.

They pose the following:







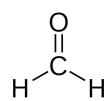
Impact of old chemistries on the environment:

ENVIRONMENTAL ISSU

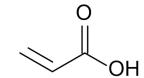


Solvent

High Aquatic Toxicity, Odour, Flammable



Carcinogenic, **Enter Animal** Food chain



Ubiquitous, Persistent, High aquatic toxicity



additives

Global warmina contributor

Contrary to popular belief, Unsustainable are also poor performers during the printing stage



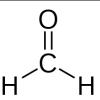
Impact of old chemistries on the performance:



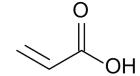
Hydrocarbon Solvent

Poor Discharging ability, Yellowing

PERFORMANCE ISSUE



Carcinogenic to humans



Poor Rheology, Poor Colour build up, Difficult to print on rotary printing machines



etrochemical additives

Discharge inhibitors



Impact of old chemistries on Banned Heavy Metals:

These "obsolete" chemistries during the discharge printing process also release banned heavy metal such as Nickle (Ni) & Tin (Sn)





What's New?

SCHUTZEN Chemical group offers Sustainable water based Ready Made print paste for discharge style of printing on pre-reactive dyed cellulose substrate. Our products do not contain hazardous ingredients such as formaldehyde, Kerosene, Hydrocarbon solvents & petrochemical based rheology modifiers.









Environmental Risks are mitigated using SCHUTZENPRINT Discharge products

OLD GENERATION	ENVIRONMENTAL IMPACT	NEW GENERATION Ready Made Pastes	ENVIRONMENTAL IMPACT
Hydrocarbon Solvent	High Aquatic Toxicity, Odour, Flammable	Water Based Chemistry	High biodegradability, Low to No aquatic toxicity, Odour free , Non Flammable
Formaldehyde	Carcinogenic, Enter Animal Food chain	Non Acrylate, Plant based rheology	Safe for animals & aquatic life
Acrylate based rheology	Ubiquitous, Persistent, High aquatic toxicity	Zero Formaldehyde	No environment impact, High biodegradability
Petrochemical additives	Global warming contributor	Low dependence on Petrochemical additives	Reduced environmental impact, indirect mitigation



Performance Risks are mitigated using SCHUTZENPRINT Discharge products

SCHUTZEN products are based on environmental friendly products, They also outperform competing old chemistries

OLD GENERATION	PERFORMANCE IMPACT	NEW GENERATION Ready Made Pastes	PERFORMANCE IMPACT
Hydrocarbon Solvent	Poor Discharging ability, Yellowing	Water Based Chemistry	Better wetting, more uniform discharge ability, Non yellowing
Formaldehyde	Carcinogenic, Does not comply	Zero Formaldehyde	Safe & Compliant as per standards
Acrylate based rheology	Poor rheology, short flow, Difficult to print on rotary printing machines	Non Acrylate, Plant based rheology	Pseudoplastic flow rheology, long flow, Excellent print ability on rotary printing machines
Petrochemical additives	Discharge inhibitor	Right additives	Discharge enhancers





SCHUTZEN Chemical group offers Zero formaldehyde ready made print pastes

Ready Made Print Paste for Regular Water based Ready made print paste:

SCHUTZENPRINT-WHITE **WDC**

SCHUTZENPRINT-COL WDC

SCHUTZENPRINT-UBER WHITE DC

ACTIVATOR:

SCHUTZENSTRIP-ZFS*: Formaldehyde based discharging agent

*The formaldehyde released by SCHUTZENSTRIP-ZFS which is well below the acceptable range of 200 parts per million



SCHUTZEN Chemical group offers Zero Formaldehyde Ready made print paste:

Ready Made Print Paste for White & Colour Discharge:

SCHUTZENPRINT-FF WHITE DC

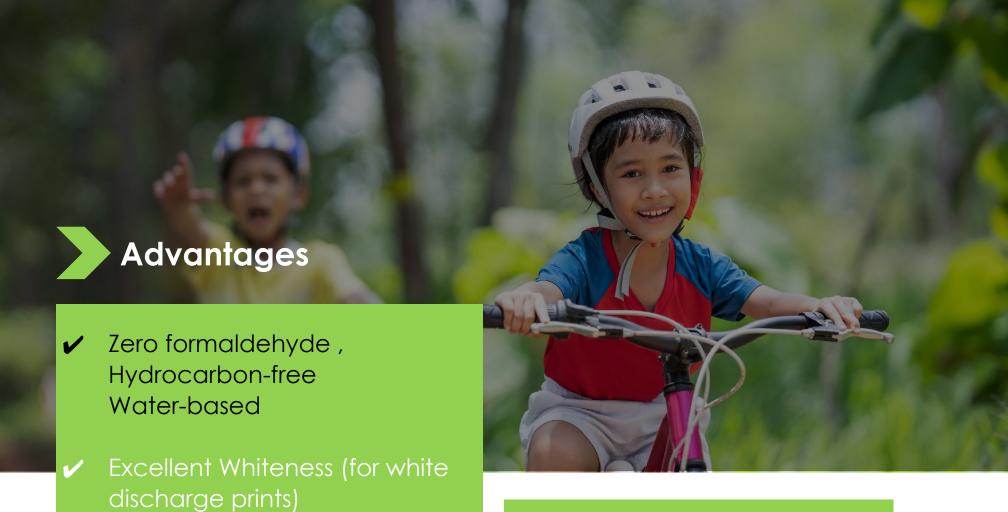
SCHUTZENPRINT-FF COL DC

ACTIVATOR:

- SCHUTZENCOL- LQC
- SCHUTZENSTRIP-TU*: Formaldehyde FREE discharging agent

*SCHUTZENSTRIP-TU Release "ZERO" Formaldehyde.





- Bright color (for color discharge
- **Excellent** washability
- Soft-hand feel

prints)

- Better solidity of prints
- No tinting of shades
- Higher sharpness
- Enhanced shade brilliance
- Baby-friendly
- No Nickel & tin problem
- Printable on rotary printing machine







