Type(Green/Import Substitution/etc)	Low cost Import Substitute			
IP status(IP Protected/Non Infringing/freedom to	Patent Filed. Indian Patent No.201841020488			
practice	dtd 31/05/2018			
TRL Status	5-8 (Material production completed in lab scale			
	method and proven through successful analysis of			
N	material characterization.)			
Plant/Equipment/Space requirement for	Digestor-1			
manufacturing	Distillation unit- Drying unit-1	L		
	Land requirement-2000 -3000 Sq Ft			
	Land requiremen	Capacity	Cost in lakhs	
		oup acting	(INR)	
CapEx	Sodium	50 Kg/ day	125.5	
	lignosulphonate			
OpEx		Capacity	Cost (INR)	
_	Sodium	50Kg/day	4500.00	
	lignosulphonate	Jorig day	.500.00	
Market size and	Small capacity: 18000Kg/annum			
	Large capacity: Depends on the investment			
Return of investment time(Please indicate in	ROI · 2-3 year (S	mall_canacity	and 2-4 years (Large	
numbers	ROI: 2-3 year (Small capacity) and 2-4 years (Large Capacity)			
Availability of raw material	All the raw materials are easily available at			
•	reasonable cost	· · · · · · · · · · · · · · · · · · ·		
Product/Equipment Certification status(Regulatory	Material Characterization were tested according to the			
Body/User agency	standards			
Unique Selling Point	• Sodium lignosulphonate from Coir pithis an			
	import substitute			
	•	Eignosurionates have a wide range of ages,		
	In Construction –As plasticizers in concrete			
	admixtures Additives in oil well drilling			
	Additivos in	Additives in oil well drilling,Animal feedbinders		
	Animal feedl			
	Animal feedlSurfactants,	oinders		
	Animal feedlSurfactants,stabilizers in	oinders colloidal susp	ensions	
	Animal feedlSurfactants,stabilizers inSodium Lign	oinders colloidal susp osulphonate fi	ensions om coir pith could be a	
	Animal feedlSurfactants,stabilizers inSodium Lign	oinders colloidal susp osulphonate fi	ensions	
Transfer of Technology charges of the Lab for	 Animal feedl Surfactants, stabilizers in Sodium Lign cost effective to coir pith. Micro:Upfront feedl 	colloidal susp osulphonate fi e import substi	ensions om coir pith could be a tute and value addition	
a) Micro	 Animal feedle Surfactants, stabilizers in Sodium Ligners of the cost effective to coir pith. Micro:Upfront feedle 2.5% on installation 	colloidal susp osulphonate fi e import substi e of Rs2 lakhs on	ensions com coir pith could be a tute and value addition +Royalty of Rs	
a) Microb) Small	 Animal feedle Surfactants, stabilizers in Sodium Ligners oct effective to coir pith. Micro:Upfront feedle 2.5% on installating Small:Upfront feedle 	colloidal susp osulphonate fr import substi- e of Rs2 lakhs on e of Rs3 lakhs	ensions com coir pith could be a tute and value addition +Royalty of Rs	
a) Micro	 Animal feedl Surfactants, stabilizers in Sodium Lign cost effective to coir pith. Micro:Upfront fe 2.5% on installati Small:Upfront fe 2.5% on installati 	colloidal susp osulphonate fi e import substi e of Rs2 lakhs on e of Rs3 lakhs	ensions rom coir pith could be a tute and value addition +Royalty of Rs +Royalty of Rs	
a) Microb) Small	 Animal feedle Surfactants, stabilizers in Sodium Ligners of the cost effective to coir pith. Micro:Upfront feedle 2.5% on installating Small:Upfront feedle 2.5% on installating Medium:Upfront 	colloidal susp osulphonate fr e import substi e of Rs2 lakhs on e of Rs3 lakhs on fee of Rs 5 la	ensions com coir pith could be a tute and value addition +Royalty of Rs	
a) Microb) Small	 Animal feedl Surfactants, stabilizers in Sodium Lign cost effective to coir pith. Micro:Upfront fe 2.5% on installati Small:Upfront fe 2.5% on installati 	colloidal susp osulphonate free import substi- e of Rs2 lakhs on e of Rs3 lakhs on fee of Rs 5 la	ensions com coir pith could be a tute and value addition s +Royalty of Rs +Royalty of Rs khs +Royalty of Rs	

Name	Designation	Lab Address	Phone	Email address
Anita Jacob	Director RDTE	Central Coir	0477 2258094	ccri.coirboard@gmail.com
	(i/c) CCRI,	Research		coirtechnologies@gmail.com
	Kalavoor	Institute		
		Kalavoor		