

**Green / Eco friendly Products (Inks and Adhesives) Credit points distribution Table**

		ADHESIVES		INKS			
		1.0 Product Design Total Points = 5					
General	Credit 1.1-	Eco- vision statement		Eco vision statement			
		Strategies adopted, resource allocation, stake holders, engagement, implemented measures & impacts - At design stage of the product - At manufacturing stage of the product		Strategies adopted: environment improvement measures/ green measures implemented At design stage of production At manufacturing stage of production ISO 14001 certified manufacturing unit			
Product testing for minimum performance as per ASTM 6886 standards	Credit 2.1-	Volatile organic compound		Recyclability/ de-inking			
		- 5% reduction over baseline vale		Demonstrate de-inking by repulp-ability test/ INGEDE Method in a NABL accredited third party laboratory			
		- 10% reduction over baseline vale		Fiber yield shall be from			
	Credit 2.2-	Flammability		pre consumer waste: 90% post consumer waste: 80%			
		concentrate/ Ready to use: flash point of the product tested as per IS Standard IS 1448 (P-69) should not be less than 65.5 degree C (150 degree F)		Chemical Emissions carry out chemical emission test as per ASTM D2369: Standard test method for volatile components of coatings			
		3.0 Raw Materials Total Points = 35					
Eliminate exposure to prohibited substances that can lead to long term health effects either through respiration / direct contact	Parameter (unit of measurement)	limit value	Remark with respect to parameter give in US and EU documents		Elimination of prohibited Solvents		
		Arsenic (mg/l)	0.2	Toxicity		Aromatic Hydrocarbons	
		Mercury (mg/l)	0.01	Heavy metals		Sum of concentration of aromatic hydrocarbons shall be less than <1% by weight. Test the concentration of aromatic hydrocarbons as per ASTM D1319 std. method for hydrocarbon in liquid petroleum products by fluorescent indicator adsorption or ISO 3837: Liquid petroleum products- determination of hydrocarbons - fluorescent indicator adsorption.	
		Lead (mg/l)	0.1	Heavy metals		Halogenated Hydrocarbons	
		Cadmium (mg/l)	2	Heavy metals		Eliminate use of halogenated hydrocarbons such as chlorofluorocarbon (HCF) during manufacturing process.	
Encourage the use of industrial waste in the manufacturing process to avoid dumping of waste in landfills, thereby reducing environmental impacts	Credit 3.2	Recycled Content		Heavy Metals and Phthalates			
		Recycled Content of 20%		Sum of concentration of heavy metals shall not exceed 500ppm			
		Recycled Content > 20% ≤25%		a) ISO 3858: Determination of soluble metals content by flame atomic absorption spectrometric method			
		Recycled Content > 25% ≤30%		Concentration of phthalates shall not exceed 1000ppm			
		Recycled Content > 30% ≤35%		a) DEHP, DBP, DINP, DIDP and DnOP			
Encourage the use of industrial waste in the manufacturing process to avoid dumping of waste in landfills, thereby reducing environmental impacts	Credit 3.2	Regional Material		b) ISO 14389:2014 specifies a method of determining phthalates with gas chromatography-mass spectrometry			
		Regional Material content > 40% ≤50%					
		Regional Material content > 50% ≤59%					
		Regional Material content > 60% ≤70%					
		Regional Material content > 70% ≤80%					
		4.0 Manufacturing Process Total Points = 10					
Enhance energy efficiency in the manufacturing process of the product, to reduce environmental impacts	Credits 4.1	Energy efficiency (improvement in last 3 years)		Energy efficiency			
		Reduction in specific water consumption (improvement in the last 3 years)		Conduct detailed energy audit at regular interval (once in 3 years) and implement energy conservation measures			
		Reduction in specific energy consumption ≥5%		Specific Energy Consumption (SEC)			
		Reduction in specific energy consumption ≥10%		Reduction in specific energy consumption ≥5%			
		Reduction in specific energy consumption ≥15%		Reduction in specific energy consumption ≥10%			
Enhance energy efficiency in the manufacturing process of the product, to reduce environmental impacts	Credits 4.2	Water efficiency		Water efficiency			
		Reduction in specific water consumption (improvement in the last 3 years)		Conduct detailed energy audit at regular interval (once in 3 years) and implemented energy conservation measures.			
		Reduction in specific water consumption ≥5%		Specific Energy Consumption (SEC)			
		Reduction in specific water consumption ≥10%		Reduction in specific energy consumption ≥5%			
		Rain water harvesting- harvest 95% rainwater run-off from roof & non- roof areas		Reduction in specific energy consumption ≥10%			
Encourage the use of on-site & off site renewable energy sources to reduce the dependence on fossil fuels and their associated environmental impacts.	Credits 4.3	Renewable Energy Manufacturing Process		Renewable Energy			
		Renewable Energy		Onsite and off site renewable energy generation			
		On site renewable energy generation (both electrical and thermal) ≥2.5% ≤5% substitution		≥ 5% of total energy consumption			
		>5% substitution		≥ 10% of total energy consumption			
				≥ 15% of total energy consumption			
		≥ 20% of total energy consumption					
		5.0 Waste Management Total Points = 5					
To ensure that the solid, liquid & gaseous wastes discharged from the plant complies with all local regulations	Credits 5.1	Waste utilization and disposal		Compliance to local/ regional/ national regulations related to waste management			
		Non hazardous waste		Non hazardous waste			
		10% reduction in disposal of waste per unit of production		≥10% reduction in disposal of waste per unit of production			
		15% reduction in disposal of waste per unit of production		hazardous waste (solid and liquid)			
		hazardous waste		≥5% reduction in disposal of waste per unit of production			
		≥10% reduction in waste going to landfill		≥10% reduction in disposal of waste per unit of production			
		≥15% reduction in waste going to landfill		≥15% reduction in disposal of waste per unit of production			
		6.0 Life cycle Assessment Total Points = 10					
Identify environmental impact at every stage of the life cycle of the product and initiate measures to reduce such impacts	Credits 6.1	Life Cycle Approach		Life cycle analysis			
		Life cycle analysis		Carry out life cycle analysis considering 'Cradle to Gate' as boundary condition and identify environmental reduction strategies.			
		Measures taken & quantification of benefits achieved					
		Implementation of at least one initiative					
		2% impact reduction					
		4% impact reduction		Implementation of identified LCA strategies and quantification of benefits			
		6% impact reduction		Strategies implemented ≥1			
		8% impact reduction		Strategies implemented ≥2			
		10% impact reduction		Strategies implemented ≥3			
		7.0 Product Stewardship Total Points = 10					
Educate those involved in handling the product at every stage post-despatch, so as to reap the intended environmental benefits.	Credits 7.1	Education		Stakeholder Education and Awareness			
		1) Instruction for safe and efficient use of cleaner (i) Dilution instructions, (ii) use instructions (that include information on incompatible surfaces), (iii) disposal instructions 2) Label shall carry symbols and information required by the existing laws of the country		Quality Management System			
To encourage manufacturers to institute a mechanism for product take-back in case of product rejection / end of shelf life of the products for recycling or safe disposal	Credits 7.2	Extended Producer Responsibility		Extended Producer Responsibility			
		Extended Producer Responsibility		Institute a mechanism for recycling of expired products			
utilize environment friendly packaging materials and implement measures to reduce the overall environment impact	Credits 7.3	Product Packaging		Sustainable packaging materials			
		Utilization of environment friendly materials and measures to implement to minimize overall environment impact dur to packaging					
		8.0 Innovation Total Points = 5					
Recognize initiatives that are not addressed in this Certification system but have a profound impact in protecting the environment.	Credits 8.1	Innovation		Innovation and Awards			
		Innovation: each innovative measure implemented at any stage of life cycle will gain 1 credit point		Achieve significant and measurable environmental performance using a strategy not address in the GreenPro std.			
		Other credentials, Awards and Accolades		Any measure exceeding the threshold of the credits that are applicable for exemplary performance			
				Credentials, awards and accolades related to energy and environmental performance improvement.			