◆ INVENTORY MATRIX

Corn Fiber

	Material input	Energy use	Waste & emissions
Raw material extraction Culticvate & harvest	tree gasoline	electricity	air emission solid waste
Material processing polymer, sliver	water bleach gum sodium nydroxide sodium sulfide wool titanium oxide	electricity heat	air emission water waste water pollutant
Component manufacturing make fabrics	chemicals pigments ink	electricity	air emission water pollutant
Assembly&packaging		electricity	air emission fabric cut-offs
Distribution&purchase	disel	electricity	air emission
Installation&use		electricity	
Maintenance&upgrade		water	water waste
Cycle: reuse (product/component)		water	water waste
Cycle: recycling (materials)			
Cycle: disposal (incineration/landfill)	disel	heat	air emission water pollutant solid waste

◆ IMPACT MATRIX

Corn Fiberv

Negative impact

No impact

Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/ acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employmen creation
•	•	•	•	•	•	•	•	•	•
*	•	•	♦	♦	•	•	•	•	•
*	•	•	•	•	•	•	•	•	•
*	•	•	•	•	*	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	*	•	•	•	•	•	•	•	•
•	•	•	•	*	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
			Resource Depletion Marming Ozone layer depletion Marming Ozone layer depletion	Resource Depletion Warming Ozone layer depletion acidification Acid rain/acidification Acid rain/acidification Acid rain/acidification Acid rain/acidification Acid rain/acidification		Resource Depletion Warming Coone layer Acid rain/ acidification waste degradation A A A A A A A A A A A A A A A A A A A	Resource Depletion Global Warming depletion acidification waste degradation Pollution A A A A A A A A A A A A A A A A A A A	Resource Depletion Solid Warming Ozone layer depletion acidification of the control of the contr	Resource Global Warming Ozone layer acid rain/ depletion acidification Solid degradation Pollution Pollution Biodiversity A Solid degradation Pollution Pollution Pollution Biodiversity A Solid degradation Pollution P

◆ INVENTORY MATRIX

Polypropylene

	Material input	Energy use	Waste & emissions
Raw material extraction cultivate, harvest	pesticide disel seed water	man power electricity	air emission solid waste water waste water pollutant
Material processing mix, pelletize	chemicals water	electricity	air emission solid waste water waste water pollutant
Component manufacturing extrude		electricity	air emission solid waste
Assembly&packaging	polyethylene	electricity	air emission
Distribution&purchase	disel gasoline	electricity	air emission
Installation&use	water	electricity	air emission water waste
Maintenance&upgrade	water detergent	electricity	water pollutant
Cycle: reuse (product/component)	water	electricity	air emission water waste
Cycle: recycling (materials)	disel	electricity	air emission
Cycle: disposal (incineration/landfill)	disel	heat	air emission water pollutant solid waste

◆ IMPACT MATRIX

Polypropylene

Negative impact

No impact

Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/ acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employmen creation
•	*	*	•	*	•	*	•	•	•
•	•	•	*	♦	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	*	•	•	•	•	•
*	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	*	•	•
•	•	•	•	•	•	•	*	•	•
									Resource Clobal Warming Capeletion Acid rain/ depletion Acid Ration/ depletion Acid Ration

*** INVENTORY MATRIX**

PVC

	Material input	Energy use	Waste & emissions
Raw material extraction	drill	power electricity	air emission water pollutant
Material processing crude extrusion, liquify	mold	electricity	petrolum paraffin wax asphalt air emission
Component manufacturing suspension	hydro carbons ethyl benzene	electricity	dirty oil water waste air emission
Assembly&packaging		electricity	air emission
Distribution&purchase	disel gasoline	electricity	air emission
Installation&use	water	electricity	air emission water waste
Maintenance&upgrade	water	electricity	water waste water pollutant
Cycle: reuse (product/component)	water	electricity	water waste water pollutant
Cycle: recycling (materials)			
Cycle: disposal (incineration/landfill)	disel	heat	air emission water pollutant solid waste

◆ IMPACT MATRIX

PVC

Negative impact

No impact

	Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/ acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employmer creation
Raw material extraction	•	•	•	•	•	•	•	•	•	*
Material processing crude extrusion, liquit	•	•	•	•	•	•	•	•	•	•
Component manufacturing suspension		•	•	•	•	•	•	•	•	•
Assembly &packaging	•	•	•	•	•	•	•	•	*	•
Distribution &purchase	•	•	•	•	•	•	•	•	•	•
Installation&use	•	•	•	•	•	•	•	•	•	•
Maintenance &upgrade	•	•	•	•	•	•	•	•	•	•
Cycle: reuse (product/ component)	•	•	•	•	•	•	•	•	•	•
Cycle: recycling (materials)	•	•	•	•	•	•	•	•	•	•
Cycle: disposal (incineration/ landfill)										

◆ INVENTORY MATRIX

Witch Hazel Foam

	Material input	Energy use	Waste & emissions
Raw material extraction grow shrub, collect	seed water fertilizer pesticide	man power electricity	water waste water pollutant air emission
Material processing clean, boil	water bio-chemicals gasoline	electricity	air emission solid waste
Component manufacturing combine with alcohol add chemicals	alcohol sodium citrate machine benzoic acid glycerin sodium tocopherol	electricity	chemicals water pollutant air emission
Assembly&packaging	water plastic	electricity	air emission water waste
Distribution&purchase	disel	electricity	air emission water pollutant
Installation&use	water	electricity	water waste
Maintenance&upgrade			
Cycle: reuse (product/component)			
Cycle: recycling (materials)		electricity	air emission
Cycle: disposal (incineration/landfill)	disel	heat	air emission water pollutant

◆ IMPACT MATRIX

Witch Hazel Foam

Negative impact

No impact

	Resource Depletion	Global Warming	Ozone layer depletion	Acid rain/ acidification	Solid waste	Land degradation	Water pollution	Air pollution	Reduced biodiversity	Employmen creation
Raw material extraction grow shrub, collect	•	•	•	•	•	•	•	•	•	•
Material processing clean, boil	*	•	•	•	•	*	•	•	*	*
Component manufacturing combine with alcohol add chemicals	*	•	•	*	•	♦	•	•	•	•
Assembly &packaging	•	•	•	•	*	*	•	•	•	•
Distribution &purchase	•	•	•	•	*	*	•	•	•	•
Installation&use	•	•	•	•	•	•	•	•	•	•
Maintenance &upgrade	•	•	•	•	•	*	•	•	•	•
Cycle: reuse (product/ component)	•	•	•	•	•	•	•	•	•	•
Cycle: recycling (materials)	*	•	•	•	*	•	*	•	•	•
Cycle: disposal (incineration/ landfill)										

Process Tree Comparison

How careU meet sustainable design goals

Kit





