 STRATASYS®	Ecoworks A
Material Safety Data Sheet	208986-0001

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	Ecoworks A
Application of the substance/the preparation	Chemicals for various applications.
General Use	Support removal, parts created on Stratasys 3D Printers
Manufacturer and Address	Stratasys, Inc. 7665 Commerce Way Eden Prairie, MN 55344-2080 USA
Emergency Telephone Number	+1 800-595-5053 (INFOTRAC Command Center)

2. HAZARDS IDENTIFICATION

Classification	Xn Harmful
Health hazards	Harmful if swallowed. Risk of serious damage to eyes.

3. COMPOSITION/ INGREDIENT INFORMATION

Chemical characterization	Mixture of substances listed below with non-hazardous additions.		
Dangerous components	CAS: 15630-89-4	Disodium carbonate, compound with hydrogen peroxide (2:3)	10-25%

4. FIRST AID MEASURES

General information	Remove contaminated clothing.
After inhalation	Supply fresh air; consult doctor in case of symptoms.
After skin contact	Wash with soap and water. If skin irritation continues, consult a doctor.
After eye contact	Rinse opened eye for several minutes under running water. Use eye protection. Call a doctor immediately.
After swallowing	Do not induce vomiting! Rinse out mouth and then drink plenty of water. Call a doctor immediately

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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide (CO ₂), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
Extinguishing media which must not be used for safety reason.	Do not use water as an extinguisher with a full water jet.
Special hazards caused by material.	Can be released in case of fire: Carbon monoxide (CO) and Carbon dioxide (CO ₂). Under certain fire conditions, traces of other toxic gases cannot be excluded. Oxidizing by development of oxygen.
Protective equipment	Wear self-contained breathing apparatus. Wear full protective suit.
Additional information	Cool endangered containers with water spray jet. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal related safety precautions	Ensure adequate ventilation. Avoid contact with eyes. Wear protective clothing and keep away unprotected persons. Avoid causing dust. Avoid breathing dust. Remove all ignition sources.
Measure for environmental protection	Do not allow to enter drainage system, surface or ground water.
Measures for cleaning/collecting	Ensure adequate ventilation. Collect mechanically. Send for recovery or disposal in suitable containers. Dispose of the material collected according to regulations.



7. HANDLING & STORAGE

Safe handling	Ensure good ventilation/exhausting at the workplace. Avoid skin and eye contact. Prevent formation of dust. Any deposit of dust which cannot be avoided must be removed regularly. Do not breathe dust. Make sure that all applicable workplace limits are observed.
Protection against explosion and fires	Protect from heat. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Do not spray on flames or red-hot objects.
Requirements to be met by storerooms and containers	Observe all local and national regulations for storage of water polluting products.
Storage in one common storage facility	Store away from foodstuffs. Store away from flammable substances. Store away from oxidizing agents.
Storage conditions	Store in cool, dry conditions in well sealed containers. Protect from heat and direct sunlight. Store container in a well ventilated position. Keep container tightly sealed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems	No further data; see Section 7.
Components with critical values that require monitoring at the workplace	Observe all workplace limits for dust. The lists that were valid during the compilation were used as basis.
General protective and hygienic measures	Keep away from foodstuffs, beverages and food. Do not eat, drink or smoke while working. Avoid contact with the eyes. Avoid close or long term contact with the skin. Instantly remove any contaminated garments. Wash hands during breaks and at the end of the work. Use skin protection cream for preventive skin protection.
Breathing equipment	Use breathing protection in case of dust formation. If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
Protection of hands	Protective gloves To avoid skin problems reduce the wearing of gloves to the required minimum. Check the permeability prior to each renewed use of the glove.

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	<p>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.</p> <p>Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.</p> <p>Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p>
Protective gloves	<p>To avoid skin problems reduce the wearing of gloves to the required minimum.</p> <p>Check the permeability prior to each renewed use of the glove.</p> <p>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.</p> <p>Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture.</p> <p>Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.</p>
Material of gloves	<p>The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p>
Penetration time of glove material	<p>Protective gloves should be replaced at first signs of wear.</p> <p>The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.</p>
Eye protection	<p>Tightly sealed safety glasses.</p>
Body protection	<p>Protective work clothing.</p> <p>Protective clothing should be selected specifically for the working place.</p>

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9. PHYSICAL & CHEMICAL PROPERTIES

Form	Solid
Color	White
Smell	Characteristic
Melting point/melting range:	Not determined
Boiling point/boiling range	Not determined
Flash point	Not applicable
Inflammability (solid, gaseous)	Contact with combustible material may cause fire.
Self-inflammability	Product is not self igniting.
Danger of explosion	At elevated temperatures explosive when mixed with combustible material.
Density	Not determined
Solubility in / miscibility with water	Insoluble
Addition information	Further information, refer to technical data sheet.

10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications. Avoid impact, friction, heat, sparks, and electrostatic charges.
Materials to avoided	Strong oxidizing agents.
Dangerous reactions	No dangerous reactions known.
Dangerous products of decomposition	Carbon monoxide (CO) and Carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION

LD/LC50 values that are relevant for classification	15630-89-4 Disodium carbonate, compound with hydrogen peroxide (2:3)	
Oral	LD50	1034 mg/kg (rat)
Dermal	LD50	> 2000mg/kg (rabbit)
Inhalative	LC50/1 h	> 4.58 mg/l (rat)
Primary irritant effect on the skin	Dust particles may mechanically irritate the skin.	
Primary irritant effect on the eye	Strong irritant with the danger of severed eye injury.	

**STRATASYS®****Ecoworks A**

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12. ECOLOGICAL INFORMATION


Aquatic toxicity	156-89-4 Disodium carbonate, compound with hydrogen peroxide (2:3)
EC50	4.9 mg/l (Daphnia pulex)
LC50	70.7 mg/l (Fathead minnow (Pimephales promelas))
NOEC	2.0 mg/l (Daphnia pulex)
NOEC/96 h	7.4 mg/l (Fathead minnow (Pimephales promelas))
Additional ecological information.	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.

13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Disposal must be made according to official regulations.
Unclean packages	Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

US Department of Transportation (D.O.T.)	Not regulated.
IMO Regulation	Not regulated.
IATA/ICAO Regulation	Not regulated.

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15. REGULATORY INFORMATION

All components of this product are listed on these chemical inventories: U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, Korean ECL, and Australian AICS.

U.S. Regulations

EPA SARA Chemical Listings

No SARA 313-listed chemicals in this product.

California Proposition 65

Not Applicable

Toxic Substances Control Act (TSCA)

This product is in compliance with all rules and orders of TSCA

State Right-to-Know


OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Canadian Regulations

WHMIS Information: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is: D2

Disclaimer This Material Safety Data Sheet document is provided without charge to customers of Stratasys. Data is the most current known to Stratasys at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

 STRATASYS®	Ecoworks B
Material Safety Data Sheet	208986-0001

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	Ecoworks B
Application of the substance/the preparation	Chemicals for various applications.
General Use	Support removal, parts created on Stratasys 3D Printers
Manufacturer and Address	Stratasys, Inc. 7665 Commerce Way Eden Prairie, MN 55344-2080 USA
Emergency Telephone Number	+1 800-595-5053 (INFOTRAC Command Center)

2. HAZARDS IDENTIFICATION


Classification	Xn Harmful
Health hazards	Harmful if swallowed. Risk of serious damage to eyes.

3. COMPOSITION/ INGREDIENT INFORMATION

Chemical characterization	Mixture of substances listed below with non-hazardous additions.			
Dangerous components	CAS: 77-92-9	Citric acid, anhydrous	Xi, R 36	25-50%

4. FIRST AID MEASURES

General information	Remove contaminated clothing.
After inhalation	Supply fresh air; consult doctor in case of symptoms.
After skin contact	Wash with soap and water. If skin irritation continues, consult a doctor.
After eye contact	Rinse opened eye for several minutes under running water and then consult a doctor.
After swallowing	Do not induce vomiting! Rinse out mouth and then drink plenty of water. In case of persistent symptoms, consult a doctor.

 STRATASYS®	Ecoworks B
Material Safety Data Sheet	208986-0001

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Carbon dioxide (CO ₂), extinguishing powder or water spray/fog. Fight larger fires with water spray/fog or alcohol-resistant foam.
Extinguishing media which must not be used for safety reason.	Do not use water as an extinguisher with a full water jet.
Special hazards caused by material.	Can be released in case of fire: Carbon monoxide (CO) and Carbon dioxide (CO ₂). Under certain fire conditions, traces of other toxic gases cannot be excluded.
Protective equipment	Wear self-contained breathing apparatus.
Additional information	Cool endangered containers with water spray jet. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal related safety precautions	Ensure adequate ventilation. Wear protective clothing and keep away unprotected persons. Avoid skin and eye contact. Avoid causing dust. Avoid breathing dust.
Measure for environmental protection	Do not allow to enter drainage system, surface or ground water.
Measures for cleaning/collecting	Ensure adequate ventilation. Collect mechanically. Send for recovery or disposal in suitable containers. Dispose of the material collected according to regulations. Clean up affected area.

**STRATASY S®****Ecoworks B**

Material Safety Data Sheet

208986-0001

7. HANDLING & STORAGE

Safe handling	Ensure good ventilation/exhausting at the workplace. Avoid skin and eye contact. Prevent formation of dust. Any deposit of dust which cannot be avoided must be removed regularly. Do not breathe dust. Make sure that all applicable workplace limits are observed.
Protection against explosion and fires	No special measures required.
Requirements to be met by storerooms and containers	Observe all local and national regulations for storage of water polluting products.
Storage in one common storage facility	Store away from foodstuffs. Store away from oxidizing agents. Store away from metals.
Storage conditions	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers. Store container in a well ventilated position. Recommended storage temperature: 20° to 25° C (68° to 77° F).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems	No further data; see Section 7.
Components with critical values that require monitoring at the workplace	Observe all workplace limits for dust. The lists that were valid during the compilation were used as basis.
General protective and hygienic measures	Keep away from foodstuffs, beverages and food. Do not eat, drink or smoke while working. Instantly remove any contaminated garments. Avoid contact with the eyes and skin. Wash hands during breaks and at the end of the work. Use skin protection cream for preventive skin protection.
Breathing equipment	Use breathing protection in case of dust formation. If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.
Protection of hands	Protective gloves To avoid skin problems reduce the wearing of gloves to the required minimum. Check the permeability prior to each renewed use of the glove. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**STRATASYS®****Ecoworks B**

Material Safety Data Sheet

208986-0001

	Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
Material of gloves	The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Penetration time of glove material	Protective gloves should be replaced at first signs of wear. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Eye protection	Tightly sealed safety glasses.
Body protection	Protective work clothing. Protective clothing should be selected specifically for the working place.

9. PHYSICAL & CHEMICAL PROPERTIES

Form	Solid
Color	White
Smell	Characteristic
Melting point/melting range:	Not determined
Boiling point/boiling range	Not determined
Flash point	Not applicable
Inflammability (solid, gaseous)	Contact with combustible material may cause fire.
Self-inflammability	Product is not self igniting.
Danger of explosion	Product is not explosive.
Density	Not determined
Solubility in / miscibility with water	Soluble
pH-value (10 g/l) at 20° C (68° F)	~9
Addition information	Further information, refer to technical data sheet.

**STRATASYS®****Ecoworks B**

Material Safety Data Sheet

208986-0001

10. STABILITY AND REACTIVITY

Thermal decomposition / conditions to be avoided	No decomposition if used according to specifications.
Materials to avoided	Strong oxidizing agents.
Dangerous reactions	No dangerous reactions known.
Dangerous products of decomposition	Carbon monoxide (CO) and Carbon dioxide (CO ₂).

11. TOXICOLOGICAL INFORMATION

Primary irritant effect on the skin	Dust particles may mechanically irritate the skin.
Primary irritant effect on the eye	Irritant effect.

12. ECOLOGICAL INFORMATION


Additional ecological information.	Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow product to reach ground water, water bodies or sewage system.
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13. DISPOSAL CONSIDERATIONS

Disposal Instructions	Disposal must be made according to official regulations.
Unclean packages	Disposal must be made according to official regulations.
Recommended cleaning agent	Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

US Department of Transportation (D.O.T.)	Not regulated.
IMO Regulation	Not regulated.
IATA/ICAO Regulation	Not regulated.

 STRATASYS®	Ecoworks B
Material Safety Data Sheet	208986-0001

15. REGULATORY INFORMATION

All components of this product are listed on these chemical inventories: U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, Korean ECL, and Australian AICS.

U.S. Regulations

EPA SARA Chemical Listings

No SARA 3 13-listed chemicals in this product.

California Proposition 65

Not Applicable

Toxic Substances Control Act (TSCA)

This product is in compliance with all rules and orders of TSCA

State Right-to-Know

OSHA Hazard Communication Standard

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Canadian Regulations

WHMIS Information: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is: D2

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Issue date 7-22-2010

Revision History

Revision	Revision Date
1.0	7-22-2010 First release



Soluble Concentrate

Material Safety Data Sheet

102381-0005

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name	Soluble Concentrate (SC)
General Use	Alkaline detergent for soluble support removal
Manufacturer and Address	Stratasys, Inc. 7665 Commerce Way Eden Prairie, MN 55344-2080 USA
Emergency Telephone Number	+1 352-323-3500 (INFOTRAC)

2. COMPOSITION, INGREDIENT INFORMATION

COMPONENT	CAS #	%	OSHA/PEL	ACGIH/TLV
Sodium hydroxide	1310-73-2	24-25	2 mg/m ³	2 mg/m ³
EU classification sodium hydroxide ≥ 5%: Corrosive [C] R 35: Causes severe burns				

3. HAZARDS IDENTIFICATION

Emergency Overview	White, odorless granules and beads. Contains sodium hydroxide, which when combined with water, can cause severe burns to skin and eyes.
HMIS Ratings	Health: 3 Flammability: 0 Reactivity: 1
Inhalation	Sodium hydroxide aerosols may cause severe irritation of the respiratory tract
Eye Contact	Sodium hydroxide can cause severe irritation and permanent damage
Skin Contact	Sodium hydroxide can cause severe burns when combined with moisture
Ingestion	Sodium hydroxide can cause severe burns of the mouth, throat and esophagus
Chronic	No data available
Carcinogenicity	None of the components in this mixture are listed by NTP, OSHA, or ACGIH as a carcinogen



Soluble Concentrate

Material Safety Data Sheet

102381-0005

4. EMERGENCY AND FIRST AID MEASURES

Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.
Skin Contact	Remove contaminated clothing. Wash thoroughly with soap and water immediately. Get medical attention if irritation or burns develop.
Eye Contact	In cases of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
Ingestion	If swallowed, call a physician. Give large amounts of water to drink. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES & EXPLOSION HAZARD DATA

Flash Point	Not applicable
Autoignition Temperature	Not applicable
Extinguishing Media	Use dry chemical powder or carbon dioxide for small fires; for large fires, use water or foam spray
Special Fire-Fighting Procedures	Evacuate personnel to a safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus and full protective equipment.
Unusual Fire and Explosion Hazards	None known
Hazardous Decomposition Products	Thermal decomposition will produce oxides of carbon, sulfur and sodium

6. ACCIDENTAL RELEASE MEASURES

General	Notify the appropriate authorities immediately. Take all additional action necessary to prevent and remedy the adverse effects of the spill.
Specific	Contain spill. Sweep up dry sodium hydroxide for recycling or disposal. Dispose as dry waste.



Soluble Concentrate

Material Safety Data Sheet

102381-0005

7. HANDLING & STORAGE

Handling	Sodium hydroxide is extremely corrosive. Avoid contact with skin and eyes. Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Never add water to sodium hydroxide, only add sodium hydroxide to water.
Storage	Store in a cool, well-ventilated area. Keep container tightly closed.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation	Use only with adequate ventilation and in accordance with the exposure guidelines for sodium hydroxide
Respiratory	Use proper respiratory equipment if exposure limits are exceeded
Eye Protection	Wear safety goggles to prevent contact with eyes
Skin	Use protective gloves
Other	Use protective clothing as appropriate

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance	White granules and beads
Odor	Odorless
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Melting Point	Not determined
Boiling Point	Not applicable
Specific Gravity	Not applicable
Volatile By Volume (Water)	Not applicable
Solubility In Water	Soluble
pH (of solution)	~13



Soluble Concentrate

Material Safety Data Sheet

102381-0005

10. STABILITY & REACTIVITY

Stability	Stable under normal recommended storage and handling conditions (see section 7)
Hazardous Polymerization	Will not occur
Incompatibility	Strong acids, metals such as aluminum, zinc, tin
Hazardous Thermal Decomposition Products	Thermal decomposition will produce oxides of sodium

11. TOXICOLOGICAL DATA

Acute Oral	In animal studies, short-term exposure to sodium hydroxide has caused severe corrosive damage to the esophagus
Acute Dermal	Sodium hydroxide, when in contact with skin moisture, can cause severe injury depending on length of contact
Acute Inhalation	No data available for solid sodium hydroxide
Skin Irritation	Sodium hydroxide can cause severe burns
Eye Irritation	Sodium hydroxide can cause severe burn
Genotoxicity	Sodium hydroxide is negative in the Ames test

12. ECOLOGICAL INFORMATION

Fish Toxicity	No data available
Daphnia Toxicity	No data available
Bioaccumulation	No data available

13. DISPOSAL CONSIDERATIONS

Disposal of wastes and used containers must be in accordance with applicable federal, state and local regulations.

**STRATASYS®****Soluble Concentrate**

Material Safety Data Sheet

102381-0005

14. TRANSPORT INFORMATION (NOT MEANT TO BE ALL-INCLUSIVE)

U.S. Department of Transportation (D.O.T.)	This product is not regulated by D.O.T. when shipped domestically by land	
Canadian TDG Information	This product is not regulated by TDG when shipped domestically by land	
IATA Regulation	Proper Shipping Name:	Sodium Hydroxide, Solid
	UN #:	UN1823
	Hazard Class:	8
	Packing Group:	II

15. REGULATORY INFORMATION (NOT MEANT TO BE ALL-INCLUSIVE)

All components of this product are listed on these chemical inventories: U.S. TSCA, Canadian DSL, EU EINECS, Japanese ENCS, Korean ECL, Australian AICS.

16. OTHER INFORMATION

THE INFORMATION contained in the PROCEEDING report is based upon current knowledge, our experience with the product, and is not exhaustive. While not guaranteed, the information presented herein was prepared by a competent, technical professional and is true and accurate to the best of our knowledge. The information applies to product as defined by the specifications. If the product is mixed with other substances, the customer must confirm that no new hazards exist. In all cases, the user is not exempt from following all legal, administrative and regulatory procedures relating to the product, personal hygiene, and the integrity of the work environment. Stratasys® shall not be held liable for any damage resulting from handling or from contact and use with the above product.

Revision History

Revision	Revision Date
102381-0002	2006-03-16
102381-0003	2006-11-06
102381-0004	2008-06-20
102381-0005	2011-04-27



Waste Profile Datasheet

StratasyS Ecoworks Cleaning Agent with SR-20 Soluble Support Material

Discharge of wastewater is subject to varying regulatory requirements. In some countries, discharge from a support cleaning system into the public sewer system may be subject to an authorization/discharge permit. You should check with local authorities whether restrictions apply to the discharge of wastewater generated by the support cleaning system and, where necessary, apply for such permit. Values provided below represent a conservative assessment of the daily discharge values with Ecoworks Cleaning Agent when used as directed.

Characteristics	Value	Units	Daily Volumes ¹	Units
Annual discharge volume (approximate) **	3000 (800)	Liters (Gallons)	15 (4)	Liters (Gallons)
Discharge Temperature	75	° C		
pH	6.5 – 10			
Discharge per cycle	7.5 – 15 (2-4)	Liters (Gallons)		
Metals Content (average)				
Barium	37.2	µg/l	0.56	mg
Calcium	17.3	mg/l	259.5	mg
Chromium	35.9	µg/l	0.54	mg
Copper	35.8	µg/l	0.54	mg
Iron	308	µg/l	4.62	mg
Nickel	22.8	µg/l	0.34	mg
Magnesium	11.6	mg/l	174.0	mg
Manganese	9.0	µg/l	0.14	mg
Potassium	3.84	mg/l	57.6	mg
Sodium	2600	mg/l	39.0	grams
Zinc	46.2	µg/l	0.69	mg
Organic Compounds detected				
Acetone	148	µg/l	42.22	mg
Phenol	16,900	µg/l	253.5	mg
Other Characteristics (average)				
Specific conductance	8,290	µmhos/cm	N/A	
Alkalinity, Total as CaCO ₃	489	mg/l	7.34	grams
Total Dissolved Solids	12,000	mg/l	180.0	grams
Total Suspended Solids	12.3	mg/l	0.18	grams
BOD (Biological Oxygen Demand) - 5 day	561	mg/l	8.42	grams
Chemical Oxygen Demand (COD)	11,800	mg/l	177.0	grams
Total Phosphorous	36.4	mg/l	0.55	grams

Characteristics	Value	Units	Daily Volumes ¹	Units
Total Kjeldahl Nitrogen	52.4	mg/l	0.79	grams
Nitrate Plus Nitrite	6.4	mg/l	0.10	grams
Sulfate	6.8	mg/l	0.10	grams
Chloride	185	mg/l	2.78	grams
Cyanide	0.327	mg/l	4.91	mg
Aquatic Toxicity LC 50 (fish)	> 750 mg/l concentration		N/A	

Non-Detected Metals	MDL (Method Detection Limit)	Units
Aluminum	100	µg/l
Antimony	5	µg/l
Arsenic	5	µg/l
Beryllium	2.5	µg/l
Cadmium	1.1	µg/l
Cobalt	5	µg/l
Lead	1.5	µg/l
Mercury	0.1	µg/l
Silver	5	µg/l
Thallium	7.5	µg/l
Vanadium	7.5	µg/l

Waste water discharge was analyzed after removing approximately 88 cc's (5.4 cu. in.) of support material in a 7.5 liter (2 gallon) support cleaning system with the entire contents of one Stratasys Ecoworks Cleaning Agent foil bag and after a 7.5 liter water-only rinse. Larger systems with the same concentration of Ecoworks Cleaning Agent and a clean water rinse cycle of the same volume should expect similar effluent results. Under normal conditions, a user will average 16.4 cc's (1 cu. in.) of support material per part created.

¹Typical user – assumes one cycle per day at 15 liters (4 gallons) per cycle (wash and rinse volumes combined). Daily volumes for users with large support cleaning systems could be higher.