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SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	Ecoworks™ Cleaning Agent
Synonyms	Alkaline cleaning agent
SSYS Part Number	400619-0001
Recommended Use	Additive manufacturing
Company	No information available.
Importer	Stratasys Korea Limited c/o Expeditors Korea Ltd., KMTC 6-1 gate, Gimpo Int'l airport Cargo Terminal Seoul 157-240 Korea, Republic of Contact: Ms Sarah Chae TEL: +82-2-20462239
Supplier	Stratasys Inc 7665 Commerce Way Eden Prairie, MN 55344 TEL: 1(952) 937 3000
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E-mail Address	objet-info@stratasys.com

SECTION 2. HAZARDS IDENTIFICATION

GHS-Classification

Health Hazard

Acute Oral Toxicity
Serious Eye Damage/Eye Irritation

Category 4
Category 2

Physical Hazards

None

Environmental Hazards

GHS Label elements, including precautionary statements

**Signal Word****Warning****Hazard Statements**

- Harmful if swallowed
- Causes serious eye irritation

Precautionary Statements

- Wash face, hands and any exposed skin thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Wear eye/face protection.

Eyes

- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

Ingestion

- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- Rinse mouth.

Disposal

- Dispose of contents/container to an approved waste disposal plant.

Other hazards which do not result in classification

- No information available

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Sodium percarbonate	15630-89-4	45-55
Sodium carbonate	497-19-8	15-25
Tetrasodium N,N-bis(carboxylatomethyl)-L-glutamate	51981-21-6	10-20
Citric acid	77-92-9	10-20

SECTION 4. FIRST AID MEASURES

- A. Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
- B. Skin Contact** Wash skin with soap and water. If skin irritation persists, call a physician.
- C. Inhalation** Move to fresh air. If symptoms persist, call a physician.
- D. Ingestion** Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary
- E. Most Important Symptoms/Effects** Eye irritation/reactions.
- F. Indication of immediate medical attention and special treatment needed, if necessary.** Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

- | | |
|---|--|
| A. Suitable Extinguishing Media | Water spray. Dry powder. Foam. Carbon dioxide (CO ₂). |
| Unsuitable Extinguishing Media | No information available. |
| B. Specific Hazards Arising from the Chemical | Burning produces obnoxious and toxic fumes. Carbon monoxide. Carbon dioxide (CO ₂). Nitrogen oxides (NO _x) |
| C. Protective Equipment and Precautions for Firefighters | Wear self-contained breathing apparatus and protective suit. |

SECTION 6. ACCIDENTAL RELEASE MEASURES

- | | |
|---|---|
| A. Personal Precautions | Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid inhalation of dust. High risk of slipping due to leakage/spillage of product. |
| B. Environmental Precautions | Avoid release to the environment. See Section 12 for additional Ecological Information. |
| C. Methods and materials for containment and cleaning up | Sweep up and shovel into suitable containers for disposal. |

SECTION 7. HANDLING AND STORAGE

- | | |
|------------------------------|---|
| A. Handling | Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Do not take internally. Wash thoroughly after handling. |
| B. Storage | Keep tightly closed in a dry and cool place. Keep away from direct sunlight. Keep away from heat. Store away from incompatible materials. See Section 10 for Incompatibles. |
| Incompatible Products | Strong oxidizing agents. Strong reducing agents. |

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**A. Exposure Guidelines**

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

B. Engineering Measures

Ensure adequate ventilation, especially in confined areas.

C. Personal Protective Equipment**Respiratory Protection**

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Eye/Face Protection

Tightly fitting safety goggles.

Hand Protection

Protective gloves.

Skin and Body Protection

No protective equipment is needed under normal use conditions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|---------------------------------|-------------------|
| A. Appearance | White |
| Physical State | Solid (powder) |
| B. Odor | None |
| C. Odor Threshold | No data available |
| D. pH | No data available |
| E. Melting Point/Range | No data available |
| F. Initial Boiling Point | No data available |

Boiling Point/Boiling Range	No data available	
G. Flash Point	Not determined	
H. Evaporation Rate	No data available	
I. Flammable Properties	Not applicable	
J. Flammability Limits in Air	Upper No data available	Lower No data available
K. Vapor Pressure	No data available.	
L. Solubility	No information available.	
M. Vapor Density	No data available.	
N. Relative density	No data available	
O. Partition Coefficient: n-octanol/water	No data available.	
P. Autoignition Temperature	No data available	
Q. Decomposition Temperature	No data available	
R. Viscosity	No data available	
S. Molecular Weight	No data available	
T. Specific Gravity	No data available.	
U. VOC Content (%)	No data available	

SECTION 10. STABILITY AND REACTIVITY

A. Stability	Stable under normal conditions.
B. Hazardous Reactions	None under normal processing.
C. Conditions to Avoid	Heat, flames and sparks. Dust formation. Incompatible products. Protect from sunlight
D. Incompatible Products	Strong oxidizing agents. Strong reducing agents.
E. Hazardous Decomposition Products	Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO ₂). Ammonia.

SECTION 11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure	
Inhalation	Product dust may cause irritation of respiratory tract.
Eye Contact	Causes serious eye irritation. Dust contact with the eyes can lead to mechanical irritation.
Skin Contact	Contact with dust can cause mechanical irritation or drying of the skin.
Ingestion	Harmful if swallowed.
B. Delayed and immediate effects and also chronic effects from short and long term exposure	
Irritation	Irritating to eyes.
Corrosivity	No information available.
Sensitization	No information available.
Carcinogenic Effects	No information available.
Mutagenic Effects	No information available.
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target Organ Effects	Eyes. Skin. Respiratory system.
Hazardous to the Aquatic Environment	No information available
Aspiration Hazard	No information available.
C. Numerical measures of toxicity	
<u>Product Information</u>	
LD50 Oral	1454 mg/kg (ATE Mix)
LD50 Dermal	No information available.
Inhalation	
Gas	No information available.

Dust/Mist
Vapor

No information available.
No information available.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium percarbonate	= 1034 mg/kg (Rat)		
Sodium carbonate	= 4090 mg/kg (Rat)		
Citric acid	3000 mg/kg (Rat)	-	-

SECTION 12. ECOLOGICAL INFORMATION**A. Aquatic and Ecotoxicity**

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Sodium percarbonate	EC50 240 h: = 70 mg/L (<i>Chlorella emersonii</i>)	LC50 96 h: = 70.7 mg/L static (<i>Pimephales promelas</i>)		EC50 48 h: = 4.9 mg/L (<i>Daphnia pulex</i>)
Sodium carbonate	EC50 120 h: = 242 mg/L (<i>Nitzschia</i>)	LC50 96 h: = 300 mg/L static (<i>Lepomis macrochirus</i>) LC50 96 h: 310 - 1220 mg/L static (<i>Pimephales promelas</i>)		EC50 48 h: = 265 mg/L (<i>Daphnia magna</i>)
Citric acid		LC50 96 h: = 1516 mg/L static (<i>Lepomis macrochirus</i>)		EC50 72 h: = 120 mg/L (<i>Daphnia magna</i>)

B. Persistence and Degradability No information available.

C. Bioaccumulation No information available.

D. Mobility No information available.

E. Other Adverse Effects No information available.

Chemical Name	Log Pow
Citric acid	-1.72

SECTION 13. DISPOSAL CONSIDERATIONS

A. Waste from Residues / Unused Products Dispose of in accordance with local regulations.

B. Contaminated Packaging Empty containers should be taken to an approved waste handling site for recycling or disposal

SECTION 14. TRANSPORT INFORMATION

A. UN-Number Not regulated.
B. Proper Shipping Name Not regulated.
C. Hazard Class Not regulated.
D. Packing Group Not regulated.
E. Marine Pollutant Not regulated

SECTION 15. REGULATORY INFORMATION

A. Industrial Safety and Health Law:
Not applicable

B. Toxic Chemicals Control Law
Not applicable

C. Dangerous Material Safety Control

Not applicable

D. Wastes Management

Dispose of in accordance with local regulations

E. Other Regulations**RESTRICTIONS - REACH TITLE VIII** No information available.**International Inventories**

TSCA	Complies
EINECS/ELINCS	Complies
DSL/NDSL	Complies
PICCS	Complies
ENCS	Complies
IECSC	Not determined
AICS	Complies
KECL	Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

SECTION 16. OTHER INFORMATION

A. Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
B. Issuing Date	05-Nov-2015
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D. Other Information	No information available

General Disclaimer

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End of Safety Data Sheet