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Revision Number 0

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

**Product Name** Ecoworks™ Cleaning Agent

**SSYS Part Number** 400619-0001

**Synonyms** Alkaline cleaning agent

**Recommended Use** Additive manufacturing

**Importer**

Stratasys AP Limited  
c/o Expeditors Hong Kong Limited  
13/F Block 1  
Tuen Mun Distribution Centre  
3A Hung Cheung Road  
Tuen Mun, N.T. Hong Kong  
TEL: +852-39448866

**Supplier**

Stratasys Inc  
7665 Commerce Way  
Eden Prairie, MN  
55344  
TEL: 1(952) 937 3000

**Emergency Telephone Number**

1(952) 937 3000  
852-93224624  
+49 722 97772281 - Global - English language response  
+85 2 975 70887 - Asia Pacific - Multi lingual response  
+86 15626070595 - China - Chinese response

**E-mail Address** objet-info@stratasys.com

**Registration Number** No information available.

## 2. HAZARDS IDENTIFICATION

### GHS-Classification

Acute Oral Toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Acute Aquatic Toxicity	Category 2

### Physical Hazards

None

### GHS Label elements, including precautionary statements

**Signal Word**

**Warning**



**Hazard Statements**

- Harmful if swallowed
- Causes serious eye irritation
- Toxic to aquatic life

**Precautionary Statements****Prevention**

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

**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.

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Synonyms**

Alkaline cleaning agent

Chemical Name	CAS-No	Weight %	EC-No
Sodium percarbonate	15630-89-4	45-55	Present
Sodium carbonate	497-19-8	15-25	Present
Tetrasodium N,N-bis(carboxylatomethyl)-L-gl utamate	51981-21-6	10-20	257-573-7
Citric acid	77-92-9	10-20	Present

**4. FIRST AID MEASURES**

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash skin with soap and water. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Ingestion</b>	Drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician if necessary
<b>Notes to Physician</b>	Treat symptomatically.
<b>Protection of First-aiders</b>	Use personal protective equipment.

**5. FIRE-FIGHTING MEASURES****Flammable Properties**

Not flammable.

**Suitable Extinguishing Media**Water spray. Dry powder. Foam. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable Extinguishing Media**

No information available.

**Specific Hazards Arising from the Chemical**

Burning produces obnoxious and toxic fumes. Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NO<sub>x</sub>)

**Protective Equipment and Precautions for Firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	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</b>	Avoid release to the environment. See Section 12 for additional Ecological Information.
<b>Methods for Cleaning Up</b>	Sweep up and shovel into suitable containers for disposal.
<b>Other Information</b>	Not applicable.

**7. HANDLING AND STORAGE**

<b>Handling</b>	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</b>	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.
<b>Incompatible Products</b>	Strong oxidizing agents. Strong reducing agents.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Measures</b>	Ensure adequate ventilation, especially in confined areas.
<b>Personal Protective Equipment</b>	
<b>Eye/Face Protection</b>	Tightly fitting safety goggles.
<b>Skin and Body Protection</b>	No protective equipment is needed under normal use conditions.
<b>Hand Protection</b>	Protective gloves.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

**Hygiene Measures**

When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b>	Solid (powder)
<b>Appearance</b>	White
<b>Odor</b>	None
<b>Odor Threshold</b>	No information available
<b>pH</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Freezing Point</b>	No information available.
<b>Initial Boiling Point</b>	No information available.

<b>Boiling Point/Boiling Range</b>	No data available
<b>Flash Point</b>	Not determined.
<b>Evaporation Rate</b>	No data available
<b>Flammable Properties</b>	Not flammable.
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>Vapor Pressure</b>	No data available.
<b>Vapor Density</b>	No data available.
<b>Specific Gravity</b>	No data available.
<b>Water Solubility</b>	No data available
<b>Solubility</b>	No information available.
<b>Partition Coefficient: n-octanol/water</b>	No data available.
<b>Autoignition Temperature</b>	No data available
<b>Decomposition Temperature °C</b>	No information available.
<b>Viscosity</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Heat, flames and sparks. Dust formation. Incompatible products. Protect from sunlight
<b>Incompatible Products</b>	Strong oxidizing agents. Strong reducing agents.
<b>Hazardous Decomposition Products</b>	Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). Ammonia.
<b>Hazardous Reactions</b>	None under normal processing.
<b>Hazardous Polymerization</b>	None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Product Information

<b>Inhalation</b>	Product dust may cause irritation of respiratory tract.
<b>Eye Contact</b>	Causes serious eye irritation. Dust contact with the eyes can lead to mechanical irritation.
<b>Skin Contact</b>	Contact with dust can cause mechanical irritation or drying of the skin.
<b>Ingestion</b>	Harmful if swallowed.
<b>Acute Toxicity</b>	16.25% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document:

**LD50 Oral** 1,454.00 mg/kg

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 )	-	-

### Chronic Toxicity

<b>Carcinogenicity</b>	There are no known carcinogenic chemicals in this product.
<b>Irritation</b>	No information available.
<b>Corrosivity</b>	No information available.

<b>Sensitization</b>	No information available.
<b>Neurological Effects</b>	No information available.
<b>Mutagenic Effects</b>	No information available.
<b>Reproductive Toxicity</b>	No information available.
<b>Developmental Toxicity</b>	No information available.
<b>Target Organ Effects</b>	Eyes. Skin. Respiratory system.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

16.25 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Toxic to aquatic life.

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> )

**Persistence and Degradability** No information available.

**Bioaccumulation** No information available.

**Mobility** No information available.

Chemical Name	Log Pow
Citric acid	-1.72

## 13. DISPOSAL CONSIDERATIONS

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

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

## 14. TRANSPORT INFORMATION

**IMDG/IMO** Not regulated

**ICAO** Not regulated

**IATA** Not regulated

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

<u>RID</u>	Not regulated
<u>ADR</u>	Not regulated
<u>ADN</u>	Not regulated

## 15. REGULATORY INFORMATION

### 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

**RESTRICTIONS - REACH TITLE VIII** No information available.

### China

Chemical Name	List of Dangerous Goods
Sodium percarbonate	Present

## 16. OTHER INFORMATION

<b>Prepared By</b>	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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<b>Revision Date</b>	05-Nov-2015
<b>Revision Note</b>	Initial Release
<b>Recommended Restrictions</b>	No information available.

### General Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text

**End of Safety Data Sheet**