

Waste Profile Datasheet

Ecoworks Cleaning Agent with SR-10 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 | 35.7 | µg/l | 0.54 | mg |
| Calcium | 20.5 | mg/l | 307.5 | mg |
| Chromium | 48.2 | µg/l | 0.72 | mg |
| Copper | 30.9 | µg/l | 0.46 | mg |
| Iron | 354 | µg/l | 5.31 | mg |
| Nickel | 25.2 | µg/l | 0.38 | mg |
| Magnesium | 14.3 | mg/l | 214.5 | mg |
| Manganese | 6.7 | µg/l | 0.1 | mg |
| Potassium | 4.0 | mg/l | 60 | mg |
| Sodium | 2230 | mg/l | 33.45 | grams |
| Zinc | 61 | µg/l | 0.92 | mg |
| Organic Compounds detected | | | | |
| Acetone | 466 | µg/l | 6.99 | mg |
| Phenol | 37.9 | mg/l | 568.5 | mg |
| Other Characteristics (average) | | | | |
| Specific conductance | 5920 | µmhos/cm | N/A | |
| Alkalinity, Total as CaCO ₃ | 3990 | mg/l | 59.85 | grams |
| Total Dissolved Solids | 10,600 | mg/l | 159 | grams |
| Total Suspended Solids | 32.7 | mg/l | 49 | grams |
| BOD (Biological Oxygen Demand) - 5 day | 706 | mg/l | 10.59 | grams |
| Chemical Oxygen Demand (COD) | 13,400 | mg/l | 201 | grams |
| Total Phosphorous | 78.9 | mg/l | 1.18 | grams |
| Total Kjeldahl Nitrogen | 55.8 | mg/l | 0.84 | grams |
| Nitrate Plus Nitrite | ND ² | mg/l | N/A | grams |
| Sulfate | ND ³ | mg/l | N/A | grams |

| Characteristics | Value | Units | Daily Volumes¹ | Units |
|-------------------------------|--------------------------|--------------|----------------------------------|--------------|
| Chloride | 157 | mg/l | 2.36 | grams |
| Cyanide | 0.306 | mg/l | 4.59 | 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 larger support cleaning systems could be higher.

²Not detected. MDL of 0.027 mg/l

³Not detected. MDL of 4.7 mg/l