

ECOGENT®

1. Introduction

Ecogent® is an industrial detergent, which is environment friendly and non-hazardous. This product has been conceived keeping in mind the application problems during cleaning like flammability, toxicity, smell and adverse effect on base material.

2. Product salient features

- a. No flash point, hence no inflammability.
- b. Extremely lower toxicity
- c. No pungent smell as compared to hydrocarbon, chlorine and bromine based cleaning agents.
- d. Ozone depleting potential is ZERO.
- e. Easy to dispose and treat the cleaning waste.
- f. No effect on color and texture of the base material after cleaning.
- g. No dissolution of base material during cleaning.
- h. No use of Volatile organic compounds or hormone disrupting chemicals.
- i. Costs $1/5 \sim 1/10^{\text{th}}$ of other cleaning agents.

3. Removes

- a. Cutting Oil
- b. Tapping Oil
- c. Press Oil
- d. Lubricant
- e. Grease
- f. Quenching Oil
- g. Anti Rust Oil
- h. Metal Powder
- i. Grind Dust

4. Material Compatibility

Ecogent® can be applied to wide range of materials with no color change or dissolution of base material viz.

- a. Metals Steel, Aluminum, Copper, Brass & many other metals/ alloys
- b. Rubbers
- c. Plastics
- d. Resins



5. Application areas

Electronic/ Electric Parts

Home appliance (TV, Washing machine, Fridge, etc), Digital Camera, Dry cell Can, Photoreceptor Drum, Compressor, Lead Frame, Ferrite Core, Silicon Wafer, Resistor

Car Parts

Engine Block, Piston Ring, Gear, Roller Bearing, Damper, Fuel Injector, valve, Car Stereo, Brake Pad, Antenna, Pipe, Lamp

Machine Parts

Machine Tool, Gear, Bulb, Bearing, Coil, Connector, Tools, Screw, Washer, Farm Implement, Caterpillar, Construction Machine, TEFRON

Medical Equipment

Injection Needle, Measuring Device, Catheter

Others

Fastener, Metal mold, Watch, Wire Rolling, Metal Button, Office Equipment, Floor, Barrel Polishing, Pretreatment for Plating or Paint etc.

6. Cleaning Methods

The Basic process involves: Cleaning \rightarrow Water Rinsing \rightarrow Drying.

The effectiveness of cleaning depends on the following contributing factors.

- a. Concentration
- b. Washing Time
- c. Temperature
- d. Dipping/ Oscillation/ Ultrasonic/ High Pressure

7. Material Properties

Appearance	Milky White Liquid
Odor	Slight Odor
Toxicity	Slight toxicity
pH Value.	10.8~11.8
Flash point, °C	none
Flammability	
Specific gravity, 25/25 °C	1.02 – 1.05
Boiling point, °C	100°C
ODP (Ozone Depleting Potential)	Zero



8. Dosing

Ecogent® should be used in diluted condition with concentration varying from $3\sim10\%$ depending on the application.

9. Packaging & Availability

Ecogent® is available in either 5kg or 10kg jars which is easy to store & use.

10. Health & Safety

In case of Eye Contact : Immediately flush with plenty of water. Consult physician if irritation persists.

Incase of Skin Contact : Wash with Water. Consult physician if irritation persists.

In case of Ingestion: Drink plenty of water and throw up swallowed. Immediately consult a physician.

11. Handling & Storage

Handling:

Ventilation is not needed when handling. Use of safety glasses, rubber gloves & rubber boots is recommended to avoid contacting with skin and eye.

Storage: Avoid direct sunlight and store it in a cool and dark place. Wash spilled area with water or wipe up spilled liquid.

12. Precautions

- a. Avoid direct sunlight and keep it in a cool & dark place
- b. Prolonged storage may cause the separation of liquid, so it is advisable to stir it until it turns to the state of homogenized emulsion before use.
- c. Should the liquid be frozen, heat it to 15~25°C and stir it till the state of homogenized emulsion is realized.
- d. In case of water-based detergent, it may cause corrosion depending on the materials used for cleaning equipment, if kept exposed to atmosphere for a long period of time without proper drying.