

## Keepero Waste Plastic-to-Diesel (P2D) Technology

### Overview:

Keepero's innovative Plastic-to-Diesel (P2D) technology efficiently converts 50 to 100 metric tons of plastic waste daily into renewable, high-quality fuels. The outputs include ultra-low sulfur diesel (No.2 ULSD), unleaded gasoline (90-93 octane), and synthetic gas.

### Key Features and Benefits:

#### 1. Eco-Friendly Operations:

- Employs a patented Green Nano Catalyzed Cracking Catalyst to enhance efficiency and stability.
- Significantly reduces emissions of CO<sub>2</sub>, SO<sub>x</sub>, NO<sub>x</sub>, and other harmful pollutants.

#### 2. Advanced Automation:

- Continuous automatic feeding of plastics without manual intervention.
- Patented high-temperature slag removal system for uninterrupted processing.
- Computer-controlled (PLC) system ensures precision and consistency.

#### 3. Energy Efficiency:

- Patented recycling of exhaust gases as a heat source, reducing overall fuel consumption and operational costs.
- Minimal energy consumption due to optimized temperature control (operational range 300°C to 350°C).

#### 4. Compliance and Safety:

- Zero secondary pollution; quiet and clean operations.
- Compliance with stringent environmental regulations.

#### 5. Economic Advantages:

- High processing efficiency resulting in reduced plant size and personnel requirements.
- Rapid return on investment (ROI) within 36 to 48 months.

### Suitable Plastics for Conversion:

- Polyethylene (PE)
- Polypropylene (PP)
- Polystyrene (PS)
- Polyethylene Terephthalate (PET)





## KEEPERO

LDPE, HDPE, ABS RESINS,

### Plastics to Avoid:

- Polyvinyl Chloride (PVC) – due to chlorine content, resulting in corrosive by-products.
- Rubber – leads to suboptimal fuel quality and processing issues.

### Product Outputs:

- Ultra-Low Sulfur Diesel (No.2 ULSD)
- Unleaded Gasoline (90-93 Octane)
- Synthetic Gas (used internally as fuel for heating)
- Char Residue– contains 5,000 – 9000 BTU/b it can be used for fuel, additive, other uses

### Proven Track Record:

- Three operational plants successfully running since 2006, demonstrating the reliability and effectiveness of the technology.

### Environmental and Community Benefits:

- Reduces landfill usage by converting plastic waste into valuable fuel resources.
- Decreases reliance on fossil fuels, enhancing overall sustainability.
- Ideal for municipalities and industries committed to sustainable development and environmental stewardship.

## Ready to Use Clean No.2 Diesel

Depending on the purity of the plastic feedstock, the output of the **MWTE** process constitutes:

### Synthetic Gas

total recycling for the heating source of reactor

1 ton of plastic = 175 Gallons of Diesel Fuel



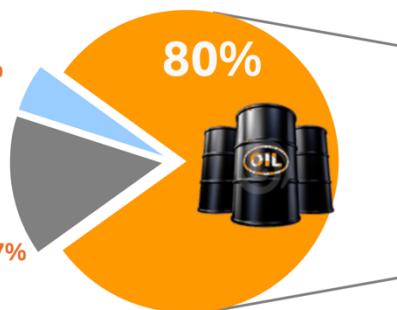
3~5%



### Char Residue

contains 5,000~9,000 BTU/lb. It can be used for fuel, additive, feedstock for tires or other rubber based products

15~17%



80%

**Ready-to-Use  
No.2 ULSD  
Ultra-Low Sulfur Diesel**

20%

**Unleaded Gasoline**