

## Aktivitas 2

Cairan Eco-enzyme memiliki banyak manfaat salah satunya sebagai cairan pembersih lantai. Mari kita bandingkan bahan yang terdapat pada cairan Eco-Enzyme dengan produk pembersih lantai berdasarkan prinsip kimia hijau yang telah kita pelajari.



- **asam asetat yang dapat membunuh kuman, virus, dan bakteri**
- **lipase, tripsin, dan amilase yang mampu mencegah bakteri patogen.**
- **NO<sub>3</sub> (Nitrat) dan CO<sub>3</sub> (Karbon trioksida) yang dibutuhkan oleh tanah sebagai nutrient**

- **Water**
- **Proprietary Surfactant Blend**
- **Proprietary Solvent Blend**
- **Sodium Metasilicate Pentahydrate**
- **Sodium Hydroxide**
- **Tetrasodium EDTA**
- **Sodium Xylene Sulfonate**
- **fragrance**
- **dye**

Bandungkanlah bahan dari cairan Eco-Enzyme dan cairan pembersih lantai komersil diatas, dengan memberikan rate/nilai berdasarkan Prinsip Kimia Hijau



keterangan :

1 = Sangat Tidak setuju

4 = setuju

2 = Tidak Setuju

5 = Sangat setuju

3 = cukup

### Cairan Ecoenzyme

### Cairan pembersih lantai komersil

1. (Waste Preventif) Pencegahan pembentukan sampah berbahaya

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

2. (Designing Safer Chemical) mendesain bahan kimia yang aman

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

3. (Catalyst) Katalis

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

4. (Energy Efficient) Proses dengan energi yang efisien

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

5. (Design Degradation) Mendesain Produk yang dapat terdegradasi

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

|                       |                       |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 1                     | 2                     | 3                     | 4                     | 5                     |
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Cairan Ecoenzyme

## Cairan pembersih lantai komersil



6. ( Minimize Risk of Accident) Meminimalisir tingkat bahaya

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

7. (Real Time Analysis for pollutant Preventif) Pencegahan pembentukan sampah berbahaya

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

8. ( Safer Solvents) Menggunakan Pelarut yang lebih aman dan tidak berbahaya

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. ( Renewable Feedstock) Menggunakan bahan baku terbarukan

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

10. ( Less Hazardous Chemical Synthesis) mengurangi dampak dari sintesis kimia

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

11. ( Reduce Derivates) Mengurangi derivatives

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

12. ( Atom Economy ) Ekonomi atom

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

| 1                     | 2                     | 3                     | 4                     | 5                     |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

