

## A Guide to Safe and Effective Cleaning Alternatives for Auto Body and Repair

The Toxics Use Reduction Institute at UMass Lowell has been working with the auto body and repair sectors in seeking alternatives to harmful solvents typically used in brake cleaning, paint gun washing, and general cleaning and degreasing. Below are six products applicable to the automotive body and repair industries that have been tested and assessed by the TURI cleaning lab.

## **Performance Specifications**

The TURI Lab measures the efficiency of a product by conducting performance testing. Stainless Steel coupons (2inx4in) are used to provide a substrate. Then they are soiled with an appropriate mixture and undergo a heating and cooling process followed by immersion in the tested product. The results below show how effective the product is at removing the soil.

## **Environmental Health and Safety Analysis**

The Pollution Prevention Options Assessment System (P2OASys) tool assesses the potential environmental, worker, and public health impacts of alternative materials and technologies. P2OASys evaluates alternatives based on the following criteria: Acute human effects, chronic human effects, physical hazards, aquatic hazards, persistence/bioaccumulations, atmospheric hazards, disposal hazards, chemical hazards, energy/resource uses, product hazards, and exposure potential. The calculated result is a ranking between 2 and 10 with 2 being the most environmentally and human health friendly and 10 being the least environmentally and human health friendly.

| Product*                       | Effectiveness | EHS Rating | Example Costs             |
|--------------------------------|---------------|------------|---------------------------|
| Acrastrip                      | 92%           | 2.9        | \$189/5 gallon pail       |
| U.S. Polychemical              |               |            | from U.S. Polychemical,   |
| 800-356-5530                   |               |            | expected duration 6 years |
| Oil Vanish                     | 93%           | 3.1        | \$11.50/12 oz. can        |
| Clift Industries               |               |            | from Home Depot           |
| 800-996-9901                   |               |            |                           |
| LPS®T91 Non-Solvent            | 84%           | 3.3        | \$38.73/5 gallon pail     |
| Degreaser                      |               |            | from Amazon.com           |
| LPSlabs.com, 800-241-8334      |               |            |                           |
| Bio-circle CB 100              | 96%           | 3.6        | \$152/5 gallon pail       |
| Walter Surface Technologies    |               |            | from Amazon.com           |
| 860-298-1100                   |               |            | expected duration 6 years |
| Grime Off Foaming Cleaner and  | 92%           | 3.6        | \$11/12 oz. can           |
| Degreaser                      |               |            | from Amazon.com           |
| Nutekgreen.com                 |               |            |                           |
| 440-996-2114                   |               |            |                           |
| ZEP 70 Penetrating Lubricant – | 86%           | 4.9        | \$12.99/12 oz. can        |
| ZEP Industries 877-842-1551    |               |            | from superkleendirect.com |

<sup>\*</sup>TURI does not endorse or recommend any commercial products