



**CONFIDENTIAL INTERNAL DOCUMENT**

## ***New Formulation Features & Benefits Comparison May 9, 2000***

### **I. History**

The origins of Mötsenböcker's Lift Off begin with the development of a releasing agent for adhesives and stickers. Through the patenting process it was discovered that this newly created formula was very effective for removing all types of oil-based stains and chewing gum, along with stickers and adhesives. The product was initially packaged as an aerosol container and then became available in various liquid containers as other Mötsenböcker's Lift Off products were patented and release to create a family of cleaners.



### **II. Modern Day**

With the continual deployment of new laws and governmental regulations, Mötsenböcker's Lift Off has sought to be a leader in the areas of product efficacy and safety. In fact, all of our recently patented formulations have received many accolades for their biodegradability and environmental effectiveness.

However, because our products are used in a wide array of applications, we have to adhere to various codes, most notably the Air Quality Management District (AQMD) and the Environmental Protection Agency's (EPA) New VOC (Volatile Organic Compound) limits. The categories, respective limits, and effective dates are detailed in the following VOC table.



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**II. Modern Day (cont. VOC table)**

All areas effective as of January 1, 2001. Any product(s) making claims for cleaning spots and stains from substrates including: carpet, fabric, clothing, upholstery, etc.

<u>Category</u>	<u>VOC Limit (Max %)</u>	<u>Effective Date</u>
Bug & Tar Remover	40	01/01/2002
Carpet & Upholstery Cleaner		
Aerosol	7	01/01/2001
Non-Aerosol	3	01/01/2001
Engine Degreasers	50	All forms-current
Aerosol	35	12/31/2004
Non-Aerosol	5	12/31/2004
General Purpose Cleaners	10	All forms-current
Non-Aerosols	4	12/31/2004
General Purpose Degreasers		
Aerosol	50	01/01/2002
Non-Aerosol	4	12/31/2004
Laundry Prewash		
Aerosol	22	Current
Non-Aerosol	5	Current
Spot Remover		
Aerosol	25	01/01/2001
Non-Aerosol	8	01/01/2001

**III. Net Effect**

Because Motsenbocker's Lift Off has a multitude of uses and falls into many categories, we have chosen a conservative path that would allow us to be compliant in all categories with a single formulation. The end result is that Motsenbocker's Lift Off needed to have a formulation that would be VOC compliant to a maximum level of 7% in an aerosol container and 3% in any Non-Aerosol or Liquid container.

**IV. Mission Accomplished!**

Motsenbocker's Lift Off was able to effectively produce a formulation that not only met the *New* VOC compliancy regulations, but actually performs at the same standards of efficacy as set by its predecessor. Even more, the product does not use any ingredients that have been suspected to cause cancer or any other human harm that are regulated and require listing by California's Prop 65 or SARA Title 313.



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**V. Next Generation**

In our efforts to move beyond the status quo, we have been researching ways to continue producing a purely solvent-based formulation with the same efficacy standards of our original product. Because of the unique efficacy properties of our original formulation, it has been very difficult to produce a new solvent-based formulation with VOC compliancy beyond January 1, 2001. Fortunately, we have and the following chart details efficacy standards and product features comparing our original Lift Off (#2 formulation) and the Current New Patent Pending Formulation. Our new product will be fully distributed during the 4<sup>th</sup> quarter of 2000 as a totally compliant VOC formulation in both aerosol and non-aerosol containers.

**VI. Formulation Comparison Chart**

<b>Efficacy:</b>	<b><u>Original</u></b>	<b><u>Current New</u></b>
Grease & Oil	!	!
Shoe Polish	!	!
Oily Foods	!	!
Crayons & Candle Wax	!	!
Gum	!	!
Lipstick & Makeup	!	!
Stickers	!	!
Adhesives	!	!
Tape	!	!
<b>Surfaces:</b>		
Carpet	!	!
Fabrics	!	!
Metals	!	!
Painted Surfaces (Oil & Latex)	!	!
Wallpapers	!	!
Plastics	!	!
<b>Exceptions</b>	Styrene Plastics	None Known
<b>Complete Evaporation</b>	Control 24 hr.	Compare 16 hr.
<b>Prop 65 Regulated</b>	Yes	No
<b>VOC Compliant (all categories)</b>	No	Yes

## Consumer Products VOC Compliancy for 2001

Many other products that we are aware of are currently formulated and based on the information provided by the manufacturing organizations they do not meet all of the *New* VOC Compliancy Regulations according to the EPA January 1, 2001 mandatory regulations. Following are a list of some brand name items that we have information available for:

<u>Brand Name</u>	<u>Key Ingredients</u>	<u>Listed VOC % Content</u>
Citristrip (non-aerosol)	*Kerosene / D Limonene	75-100%
D-Solv-It (non-aerosol)	*Kerosene / D Limonene	75-100%
Goof Off (non-aerosol)	Various Petroleum Distillates	75-100%
Goo Gone (non-aerosol)	*Kerosene / D Limonene	75-100%
Kleen Strip - Various Items	Various Petroleum Distillates	75-100%
Gum & Adhesive Aero. Rem.	Various Petroleum Distillates	75-100%
M1	Various Petroleum Distillates	75-100%
Motsenbocker's Lift Off	Various Petroleum Distillates	3-7%
Aerosol		7% Compliant
Non-Aerosol		3% Compliant
Oops! (Non-aerosol)	*Kerosene / Var. Pet. Distillates	75-100%
Parks - Various Items	Various Petroleum Distillates	75-100%
See Kleen Strip (non-aerosol)	Various Petroleum Distillates	75-100%

There are varying ranges based upon the actual packaging of the products. Specifically, there is usually a higher limit associated with an aerosol container versus a standard liquid (non-aerosol) package.

Any of the above items that make claims concerning the actual surface application of the product must comply with the VOC Table irrespective of how the product is classified (e.g. a liquid "**Paint Remover**" that claims to remove stains or spots from carpeting *must be below 3% effective January 1, 2001*).

**\* Kerosene & D Limonene are classified as 100% VOC whether combined or used independently.**

**VOC Multi-Purpose Category Comparison**  
**Stated Applications by Manufacturer**

<b>Applications</b>	<b>Lift Off 2</b>	<b>Goof Off</b>	<b>Goo Gone</b>	<b>Oops</b>
Dried Latex Paint		x		x
Crayon	x	x	x	x
Grease	x	x		x
Grease - Axle	x			
Grease - Bacon	x			
Lipstick	x	x	x	x
Oil (motor)	x	x	x	x
Oil (cooking)	x			
Scuff Marks	x	x	x	
Margarine	x			
Peanut Butter	x			
Perfume	x			
Rubber Cement	x			
Silly Putty®	x			
Candle Wax	x	x	x	
Gum	x	x	x	x
Marker & Pen Ink		x		x
Glue	x	x		
Adhesives	x	x	x	x
Sticker Residue	x	x	x	
Asphalt	x	x	x	
Tar	x	x		x
Correction Fluid		x		
Tape	x		x	
Salad Dressing	x			
Labels	x			
Oily Stains	x			
Oil - Baby	x			
Oil - Salad	x			
Soap Scum	x		x	
Shoe Polish	x		x	x
Kitchen Grease	x		x	
Tree Sap	x		x	
Make-Up	x		x	
Fried Foods	x			
Pitch & Sap	x			
Bugs & Tar	x			
Butter	x			
Disk Brake Dust	x			
Crayola® Markers	x			
Hair Spray & Hair Tonic	x			
Mascara	x			
Price Stickers	x			
<b>Total Areas (43)</b>	<b>40</b>	<b>15</b>	<b>15</b>	<b>10</b>
Percentage of Total Areas	93%	35%	35%	23%

For each of the products listed above, all of the applications that are claimed to be removed are derived directly from the manufacturer's specific package.

**VOC Multi-Purpose Category Comparison**  
**Stated Areas of Use by Manufacturer**

<b>Areas of Use</b>	<b>Lift Off 2</b>	<b>Goof Off</b>	<b>Goo Gone</b>	<b>Oops</b>
Paint	x	x		
Chrome	x	x		
Metal	x	x		
Fabric	x	x	x	x
Carpet	x	x	x	
Plastics	x	Caution		
Vinyl	x	Caution		
Fiberglass	x	Caution		
Oxidized Metals	x	Caution		
Nylon	x	x		
Polypropylene Carpet	x	x		
Wool Carpet	x	x		
Varnish	x	x		
Varnishes & Shellac	x			x
Oil-Based Painted Surfaces	x	x		x
Laminated Counters	x	x		
Glass	x	x	x	
Brick	x	x		
Wood	x	x		
Concrete	x	x		
Grout	x	x		
Walls	x		x	
Silk	x		Caution	
Satin	x		Caution	
Wool	x		Caution	
Velvet	x		Caution	
Leather	x		Caution	
Suede	x		Caution	
Rubber	x		Caution	
Latex	x		Caution	
Vinyl	x		Caution	
Plastics	x		Caution	
Latex Painted Walls	x			
Automobile Surfaces	x			
Hard Surfaces	x			x
Upholstery	x			x
Clothing	x			x
Furniture	x			x
Hardwood Floors	x			x
Cabinets	x			x
Wood Panel	x			x
Woodwork	x			x
Shoes	x			x
Formica	x			x
Lexan®	x			
Plexiglas®	x			
Appliances & Office Equipment	x			

**Legend**

- x = Recommended for use on the specific area
- blank = not mentioned for use by specific manufacturer
- Caution = specific caution recommending no use on this surface

Each of the areas listed above are derived from each manufacturer's stated claims from their individual packaging.