



Auto Cleaner/Polish

Low temperature compounded thin liquid, water external

<u>Ingredient</u>	<u>Percent by weight</u>
1 Deionized water	35.0
2 Kaopolite [®] SF	17.0
3 Deionized water	7.5
4 Odorless mineral spirit	32.0
5 Dimethyl silicone, 350 ctk.	4.0
6 Oleic Acid	2.0
7 Hoechst wax E	0.2
8 Hoechst wax LP	1.4
9 Morpholine	0.9

Procedure

Add Kaopolite[®] SF to DI water with vigorous agitation, while heating to 150°F, until well disintegrated and smooth, then add remainder of DI water and reheat to 150°F.

In another vessel, combine 4 through 8 with moderate agitation, heat to 150°F and hold until clear solution results. Continue agitation, add Morpholine then slowly add the Kaopolite-water slurry.

Shut off heat; continue gentle agitation until emulsion cools to 110°F.



Auto Cleaner/Polish **Soft Paste, emulsion**

<u>Ingredient</u>	<u>Percent by weight</u>
1 Deodorized kerosene	10.0
2 Hoechst wax S	8.0
3 Viscasil 10,000	2.5
4 Tall-oil fatty acid	1.0
5 Water	2.4
6 Morpholine	0.8
7 Water	38.3
8 Mineral Spirit	20.0
9 Kaopolite [®] SF	12.0
10 Silicone Emulsion SM-2035	5.0

Procedure

Combine 1 through 4 and heat to 210°F. Provide intensive agitation while introducing 5 through 9 as instructed.

Heat 5 to boiling, stir in 6 and add to the batch. Heat 7 to boiling and add.

Add 8, then 9 (Kaopolite[®] SF) both slowly, allowing time for thorough incorporation of each.

Change agitation to a slow stirring, add 10 and continue stirring until mixture cools to packaging temperature of 105-120°F.



Liquid Auto Cleaner-Polish High Gloss

Ingredient

Percent by weight

Oil Phase:

1	Hoechst wax E	0.2
2	Hoechst wax LP	1.4
3	Oleic Acid	3.0
4	L-45 Silicone, 350 ctk	4.0
5	Mineral Spirits	22.0
6	Morpholine	2.0

Abrasive:

7	Kaopolite [®] SF	15.0
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Water Phase:

8	Gelwhite GP	2.0
9	Water	42.9

Procedure

Blend waxes and Silicone. Melt at 150°F. Add Oleic acid and mineral spirits. Agitate and maintain at 150°F.

Disperse Gelwhite GP in water and heat to 150°F. After Gelwhite GP is well dispersed, add the Kaopolite[®] SF and continue agitation until well dispersed.

Just prior to emulsification, add morpholine to the hot oil phase. (DO NOT ADD MORPHOLINE TO THE WATER PHASE!) Prepare emulsion by adding water phase to oil phase with agitation.

Comments:

This polish is an excellent high gloss-producing cleaner polish. The Kaopolite SF is an excellent scratchless abrasive which is very suited for new finishes.

In this formulation, the Gelwhite GP functions as an emulsion stabilizer, abrasive suspending agent, and cleansing aid. It also imparts a desirable cream-lotion consistency to the finished polish.



Auto Cleaner-Polish Hard Paste

<u>Ingredient</u>	<u>Percent by weight</u>
1 Viscasil 10,000	5.0
2 Hoechst wax E	7.2
3 Hoechst wax F	4.0
4 Hoechst wax S	1.8
5 Kerosene	12.5
6 Ionac PE 110	0.25
7 Kaopolite [®] SF or 1168	12.0
8 Morpholine	57.25

Procedure

Heat 1,2,3,4 together to 194°F., hold until melted.

In separate vessel, blend 5 and 6 with gentle agitation. Add 7 slowly, and increase to vigorous agitation for 5 minutes then reduce to moderate agitation and add 8.

When well dispersed combine (5 through 8) with the melted (1 through 4) and when cooled, discharge to containers.

Comments:

Use Kaopolite[®] 1168 for more aggressive cleaning and polishing action.



Detergent Resistant Auto Cleaner-Polish Thick Liquid, Oil-External

<u>Ingredient</u>	<u>Percent by weight</u>
1 Isopar L	14.0
2 Isopar M	10.0
3 Dow Corning 536 fluid	1.0
4 Dow Corning 531 fluid	6.0
5 Emcol 14	1.0
6 Kaopolite [®] SF	10.0
8 Water	58.0

Procedure

Combine 1 through 4, then 5, and mix thoroughly.

Add 6 slowly with vigorous agitation, continuing until well dispersed. Add 7 slowly, while agitating strongly until smooth then dilute with 8.



Auto Cleaner-Polish High Gloss

<u>Ingredient</u>	<u>Percent by weight</u>
1 Deionized water	40.4
2 Bentonite	2.0
3 Kaopolite® SF	15.0
4 Hoechst wax E	0.2
5 Hoechst wax LP	1.4
6 Dimethyl silicone, 350 ctk	4.0
7 Oleic acid	3.0
8 Mineral spirit	32.0
9 Morpholine	2.0

Procedure

Add 2 to 1 with strong agitation until smooth while heating to 150°F. Continuing agitation and maintaining temperature, slowly add 3 and stir actively until free from coarse agglomerates.

In another vessel, heat 4, 5 and 6 to 150°F and blend thoroughly. Add 7 and 8, maintaining 150°F and mix well.

Stir 9 into hot oil mixture, and immediately pour hot water slurry into hot oil mixture stirring well to emulsify. Continue moderate agitation while cooling to filling temperature.



Pre-Wax Cleaner

Automotive, Liquid

<u>Ingredient</u>	<u>Percent by weight</u>
1 Deionized water	44.0
2 Kaopolite® SF	16.5
3 Deodorized kerosene	10.0
4 V M & P naphtha	20.0
5 Triethanolamine	2.5
6 Oleic acid	4.0
7 Pine Oil	2.0
8 Bentone 38	1.0

Procedure

Add 2 to 1 with strong agitation until smooth.

In another vessel, heat 3 and 4 to 100-120°F, add 5, 6, 7 & 8 and blend thoroughly.

Pour water mixture slowly, with good agitation, into warm oil mixture and blend until smooth.

Comment:

After suitable rubbing, product may be flushed off with water; or if preferred, may be allowed to dry and then wiped off with clean, dry cloth.



Luster-Powder Auto Polish

Ingredient

Percent by weight

1 Kaopolite [®] SF	95.0
2 Microfine VI	3.0
3 Dimethyl Silicone, 350 ctk	2.0

Procedure

Dry blend 1 & 2 thoroughly. Continue blending, while slowly adding 3 until well mixed.
o 1 with strong agitation until smooth.



Auto Cleaner/Polish **For machine buffing**

<u>Ingredient</u>	<u>Percent by weight</u>
1 Hoechst wax S	5.5
2 Paraffin oil, Faxam #40 or #50	5.0
3 Acintol FA-3	0.9
4 Deionized water	1.5
5 Diethylaminoethanol	0.5
6 Deionized water	66.6
7 Mineral spirit (140-190°C)	5.0
8 Penn Drake Oil 2251	5.0
9 Kaopolite® SF	10.0

Procedure

Melt 1, 2 & 3 together at 210°F. Mix 4 & 5, add to the melt with stirring. Preheat 6 to 150°F and add, slowly at first, with continuous stirring. Preheat 7 & 8 to 150°F, either separately or together and stir in. Add 9 slowly, continue stirring at 150°F or higher until thoroughly dispersed and blended. Shut off heat, but continue stirring until batch cools to room temperature.

Use Procedure:

Apply sparingly with a clean, dry cloth using an overlapping circular motion. The surface should be clean and dry before application.