

FLOOR CLEANING AND POLISHING COMPOUND

1. INTRODUCTION:

Floor cleaning and polishing compounds are used for the getting shining of the floors, either of stone, marble, wooden or metal. Different type of floor cleaners and polishing compounds are made with different abrasive, cleaning and wax chemicals. These compounds are either in liquid, solid or semi-solid types. Liquid Floor Cleaner, Liquid Cleaner, Water Proofing Compound, Wooden Polish, Herbal Termites, Nugraf Raising Compound are the major compounds. Polishing is the process of creating a smooth and shiny surface by rubbing it or using a chemical action, leaving a surface with a significant specular reflection (still limited by the index of refraction of the material according to the Fresnel equations.) In some materials (such as metals, glasses, black or transparent stones) polishing is also able to reduce diffuse reflection to minimal values.

When an unpolished surface is magnified thousands of Times, it usually looks like mountains and valleys by repeated abrasion, those "mountains" are worn down until they are flat or just small "hills." The process of polishing with abrasives starts with coarse ones and graduates to fine ones .There are various types of polishes having industrial and domestic applications ; abrasive polish, aluminum polish, motor car polishes, cellulose friction polishes, furniture polishes, leather belt polishes, pine oil metal polish etc.

2. PRODUCT & ITS APPLICATION:

Abrasive Products, Buffing and Polishing Compounds. In our range, here we proposed Synthetic Emery Grains and Powders, Hard Polishing Compound, Aluminum Oxide Polishing Compounds, Emery Grains for Floor Hardening, Buffing Compounds, Solid Polishing Compounds and Liquid Polishing Compound. These products are formulated using quality chemicals and ingredients that are sourced from certified vendors in the market. We propose the range, which is widely used for

coating and lapping various items that helps in preventing scratches, corrosion and other physical damages.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

Graduate in any discipline. Promoter with high skill of marketing and having contacts with local market is advantage.

4. INDUSTRY LOOK OUT AND TRENDS

Floor Cleaners are the aid of housekeeping to keep the house neat and clean. Cleaning agents in general can be defined as those are used to assist the cleaning process. Cleaning is primarily the removal of dirt and dust. It is used to remove stains dirt, litter, and grit, sand which scratch and wear down the surface and to remove allergens, in particular dust. Acid cleaners, alkaline cleaners, solvent cleaners and disinfectants are the types of liquid floor cleaner. The average expenditure per family on surface cleansers outside the multipurpose detergents ranges between Rs. 15 and Rs. 25 on an all-India basis and about Rs. 45 in the urban areas. The toiletries and household cleansing market is expected to grow at a CAGR of 16.36% from FY'2014-FY'2019. Floor cleaning market is the second largest product category of the toiletries and household cleansing market of India with revenues. Growing awareness, easier access to range of products through organized retail formats and changing lifestyles have been the key growth drivers for the sector with even rural households starting to display preference for toilet cleaner products instead of phenyl and acids which facilitated the further expansion of the industry in India. With a population of over one billion, India is one of the largest economies in the world in terms of purchasing power and increasing consumer spending, next to China. The Indian FMCG industry, with an estimated market size of ~ `2 trillion, accounts for the fourth largest sector in India. In the last decade, the FMCG sector has grown at an average of 11% a year; in the last five years, annual growth accelerated at compounded rate of ~17.3%. The market is expected to grow in the coming years with increasing number of innovative product launches by the

existing players focusing on niche uses and convenience such as multifunctional cleaners. Any entrepreneur venture into this field will be successful. Few Indian Major Players are as under • Dabur India Ltd. • Henkel Spic India Ltd. • Hindustan Unilever Ltd. • Pudumjee Paper Products Ltd. • Reckitt Benckiser (India) Pvt. Ltd.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

Polishes in India grew by 7 % in current retail value terms in 2015 due to similar growth in floor polish, which represented 41 % of total polishes value sales in the year. People having less time to change the flooring and it are very costly too. The increasing number of buildings with increase of population and awareness and modernization, cleaning and polishing of floor is in demand. This realizes approximately the 7 % sales rise in 2015, which was less than the growth rate averaged in the overall review period. The primary objective of the Polish industrial development policy should be to maximize its controllability.

6. RAW MATERIAL REQUIREMENTS:

The basic raw materials required for the projects are emery powder, different type of waxes, chemicals like surfactants, oxalic acid, etc. Emery as found in nature is a mainly a mixture of Corundum and iron oxide. Corundum is the toughest and hardest form of Aluminum oxide, which imparts the abrasive qualities to Emery. There are other minor contents like Silica, Titania, Calcium and Magnesia, which can alter the quality of Emery significantly. The other material is micro crystalline waxes in floor polishes, properties of braxilian grades of carnauba wax, compatibility of paraffin waxes with other substances, synthetic mineral waxes, miscellaneous synthetic waxes, additives for raising melting point of candles, wax coating for fruits, shribs, and plants, effect of paraffin on esparto montan mixtures, water proofing of kraft papers, production of montan wax, polish, abrasives, metal cleaners, nickel silver castings, cleaning, polishing metals for metallographic analysis, paste for wax calf leather, burnishing polishes for auto-mobile maintenance, are major for the project.

7. MANUFACTURING PROCESS:

The project is for manufacturing of different type of compounds. The basic process involves selection of right materials, testing of the qualities, mixing of proper quantity in proper procedure. The raw materials are mixed and the processed as per required and packed.

8. MANPOWER REQUIREMENT:

Sr. NO	Designation	of SALAR	Month	Number of employees required				
				Year	Year-2	Year-3	Year-4	Year-5
1	Machine Operators	12,000	12000.	1	1	1	1	1
2	Helpers	8,000	40000.	5	5	5	7	7
3	Production	15,000	15000.	1	1	1	1	1
4	Accounts/Stores Asst	12,500	12500.	1	1	1	1	1
5	Office Boy	9,000	9000.0	1	1	1	1	1
	Total		88500.	9	9	9	11	11

9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 3 months' time as detailed below:

Sr. No.	Activity	Time Required
1	Acquisition of premises	1.00
2	Construction (if applicable)	1.00
3	Procurement & installation of Plant & Machinery	1.00
4	Arrangement of Finance	2.00
5	Recruitment of required manpower	1.00
	Total time required (<i>some activities shall run concurrently</i>)	3.00

10. COST OF PROJECT:

The project shall cost ₹ 29.40 lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	2.00
2	Building	2.00
3	Plant & Machinery	14.00
4	Furniture, Electrical Installations	1.00
5	Other Assets including Preliminary / Pre-operative expenses	1.40
6	Working Capital	9.00
	Total	29.40

11. MEANS OF FINANCE:

Bank term loans are assumed @ 75 % of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	7.35
2	Bank Finance	22.05
	Total	29.40

12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 9.0 lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	4.50	0.25	1.13	3.38
2	Receivables	2.25	0.25	0.56	1.69
3	Overheads	2.25	100%	2.25	0.00
4	Creditors	-		0.00	0.00
	Total	9.00		3.94	5.06

13. LIST OF MACHINERY REQUIRED:

A detail of important machinery is given below: Power Requirement: 5 HP

Sr. No.	Particulars	UOM	Qty	Rate (₹)	Value (₹ in Lacs)
	Plant & Machinery /				
a)	Main Machinery				
i.	SS VESSELS FOR MIXING	NOS.	3	200000	6.00
ii.	MS blender	Nos	2	125000	2.50
iii.	PACKING MACHINE	Nos	1	150000	1.50
IV	weighing machine	Nos	1	100000	1.00
V	Installation, erection electr.			150,000	1.50
vi	taxes and transportation			150000	1.50
	<i>sub-total Plant &</i>				14.00
	Furniture / Electrical				
a)	Office furniture	LS	1	50000	0.50
b)	Stores Almirah	LS	1	0	0.00
c)	Computer & Printer	L. S.	1	50000	0.50
	<i>sub total</i>				1.00
	Other Assets				
a)	preliminary and				1.40
	<i>sub-total Other Assets</i>				1.40
	Total				16.40

All the machines and equipment are available from local manufacturers. The entrepreneur needs to ensure proper selection of product mix and proper type of machines and tooling to have modern and flexible designs. It may be worthwhile to look at reconditioned imported machines, dies and tooling. Some of the machinery and dies and tooling suppliers are listed here below:

- Kamdhenu Agro Machinery
Plot No. 6, Near Power House,

Wathoda
Nagpur - 440035
Maharashtra, India

Road,

Wathoda

- Future Industries Private Limited
Shed No. 15, Ambica Estate,
Corporation Municipal Plot,
Opposite Sadvichar Hospital,
Naroda, Ahmedabad - 382330,
Gujarat, India
- The Global Pharma Equipments
Star Industrial Estate,
D-32, Naik Pada,
Near Hanuman Mandir,
Opposite Dwarka Industrial Estate,
Vasai East, Vasai - 401208,
Maharashtra, India

14. PROFITABILITY CALCULATIONS:

Plant Capacity: The production basis for a typical tiny unit would be as under:
Working hours/day: 8 (1 shift) Working days in a year: 300 Annual Production capacity: 150 MT Floor Cleaning and Polishing Compounds. The unit has been assumed to operate at 60%, 70%, 80%, 90% and of its installed capacity in the first, second, third, fourth and fifth year.

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	27.00	31.50	36.00	40.50	45.00
3	Raw Materials & Other	₹. In	19.64	22.92	26.19	29.47	32.74

	direct inputs	Lacs					
4	Gross Margin	₹. In Lacs	7.36	8.58	9.81	11.03	12.26
5	Overheads except interest	₹. In Lacs	4.30	4.57	5.11	5.27	5.38
6	Interest	₹. In Lacs	2.21	2.21	1.47	1.10	0.88
7	Depreciation	₹. In Lacs	9.80	7.00	4.90	3.50	3.15
8	Net Profit before tax	₹. In Lacs	-8.95	-5.20	-1.67	1.16	2.85

The basis of profitability calculation:

The growth of selling capacity will be increased 10% per year. (This is assumed by various analysis and study; it can be increased according to the selling strategy.)

Energy Costs are considered at Rs 7 per Kwh and fuel cost is considered at Rs. 65 per litre. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 51.08 % of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	45.00
2	Variable costs	₹. In Lacs	32.74
3	Fixed costs incl. interest	₹. In Lacs	6.26
4	BEP = $FC/(SR-VC) \times 100$	% of capacity	51.08%

16. STATUTORY / GOVERNMENT APPROVALS

As per the allocation of business rules under the Constitution, labour is in the concurrent list of subjects. It is dealt with by the MOLE at the Central and Departments of Labour under State Governments in respective States / UTs. The MOLE has enacted workplace safety and health statutes concerning workers in the manufacturing sector, mines, ports and docks and in construction sectors.

Further, other Ministries of the Government of India have also enacted certain statutes relating to safety aspects of substances, equipment, operations etc. Some of the statutes applicable in the manufacturing sector are discussed below:

The Static and Mobile Pressure Vessels (Unfired) Rules, 1981

These (SMPV) Rules are notified under the Explosives Act, 1884. These rules regulate storage, handling and transport of compressed gases. These rules stipulate requirements regarding construction and fitments, periodic testing, location, fire protection, loading and unloading facilities, transfer operations etc. in respect of pressure vessels whose water capacity exceeds one thousand litres. These rules are enforced by the Chief Controller of Explosives under the Ministry of Industry and Commerce, Govt. of India (PESO).

The Manufacture, Storage and Import of Hazardous Chemicals Rules (MSIHC), 1989

These MSIHC Rules are notified under the Environment (Protection) Act, 1986. These rules are aimed at regulating and handling of certain specified hazardous chemicals. The rules stipulate requirements regarding notification of site, identification of major hazards, taking necessary steps to control major accident, notification of major accident, preparation of safety report and on-site emergency plan; prevention and control of major accident, dissemination of information etc. These rules are notified by the Ministry of Environment and Forests (MOEF) but enforced by the Inspectorates of Factories of respective States / UTs in the manufacturing sector.

The Factories Act, 1948 and State Factories Rules

The Factories Act, 1948 is very comprehensive legislation dealing with the matters of safety, health and welfare of workers in factories. The Act places duties on the occupier to ensure safety, health and welfare of workers at work. Some of the salient provisions of the Act include:

- Guarding of machinery
- Hoists and Lifts; Lifting Machines and Appliances
- Revolving Machinery
- Pressure Plant
- Excessive Weight
- Protection of Eyes
- Precautions against dangerous fumes, gases etc.
- Explosive or inflammable dust, gas etc.
- Precautions in case of fire
- Safety of buildings and machinery
- Permissible limits of exposure of chemical and toxic substances
- Entrepreneur may contact State Pollution Control Board where ever it is applicable.

17. BACKWARD AND FORWARD INTEGRATIONS

Chemical companies often become integrated and undergo other activities outside the chemical industry. Increased competition prompts many companies to reduce supply chain costs by looking outside the chemical sector at suppliers and customers. While most companies within the chemicals sector primarily produce chemicals, some companies also conduct other manufacturing activities. The exact proportion of chemicals sector companies that are integrated with other sector activities is unknown, but many companies actively seek vertical integration. Many manufacturers pursue vertical integration to secure suppliers and customers for their products.

Mergers and acquisitions are a common way for companies to undertake new chemical ventures. By purchasing their chemical suppliers, some manufacturers secure future chemical feedstock for their products or other chemicals that they use in manufacturing. The company making the purchase obtains valuable expertise and equipment. Some mining and petrochemical production is more cost-effective when integrated within a chemical company.

Energy and feedstock costs are often a significant expense for chemical companies. Integrating chemical production with activities that secure supplies of chemical feedstock and energy is relatively common as chemical companies grow. Chemical companies are located near mines, oil fields, ammonia factories and water supplies. This reduces transportation costs and increases the reliability of supplies by reducing the distance between feedstock and the factory.

Some companies, such as Sino-Coking Coal and Coke Chemical Industries Incorporated, own their mines. BHP Billiton operates a broad range of mines and is primarily a mining company. It does, however, also produce petrochemical feedstock for the chemical industry and therefore operates within the chemical industry as well. These companies technically operate within both the chemical and mining industries in their normal business operations.

Integrating a chemical company with other activities provides several direct benefits for the company and is becoming increasingly common. High energy costs necessitate greater control of energy resources and minimal reliance on expensive transportation. Chemical companies experience volatile profitability due to fluctuations in feedstock and energy expenses. Some companies control this volatility through careful supply chain management and by charging supply

surcharges. Actively researching and developing alternative feedstock and energy supplies helps the company reduce costs.

Vertical integration supports these activities by eliminating redundant activities at multiple companies and increasing efficiency. By consolidating activity among multiple, similar operations, chemical companies achieve cost savings that contribute to higher profitability. End products are often very profitable, and some chemical companies purchase their former customers to take advantage of the marked-up prices of products further along in the supply chain.

Integration may become more common for many chemical companies as competition strengthens and traditional feedstock becomes more expensive. Market demand for chemical feedstock increases as emerging market economies grow and result in increased consumer spending around the world.

18. TRAINING CENTERS AND COURSES

There is no such training required to start this business but, basic chemical bachelor's degree is plus point for enterpriser. Promoter may train their employees in such specialized institutions to grow up the business. There are few specialised Institutes provide degree certification in chemical Technology, few most famous and authenticate Institutions are as follows:

1. Department of chemical LD college of engineering

No.120, Circular Road, University Area, Navrangpura,
Opposite Gujarat University, Ahmedabad, Gujarat 380015

2. MIT College of chemical Engineering, **Pune**
Gate.No.140, Raj Baugh Educational Complex,
Pune Solapur Highway,
Loni Kalbhor, Pune - 412201

Maharashtra, India

Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.

Source:- Udyami Mitra/Sidbi