PROCESS KNOW HOW FOR DEHYDRATION OF CORIANDER FOLIAGE INTRODUCTION

Coriandrum sativum L. has two species and belongs to the family Apiaceae. Coriandrum sativum L The leaves, fruits and stems have a pleasant aromatic aroma hence used as a flavouring substance. The entire parts of the plant are suitable for eating, but mainly the dried seeds and fresh green leaves are used in various culinary preparation. The whole coriander plant is used in chutneys preparing, and the leaves, in particular, are used for flavouring many curries, sauces and soups. The volatile oil content in the product is influenced by factors such as variety, raw material storage, handling and processing conditions. The product is generally light to dark green in colour the product is microbiologically stable and free from pathogenic bacteria. Product characteristics are,

- i) Product can be packed in Metalized polyester pouches to hold about 25 g, 50g, 100g, 250 g, 500 g are suitable.
- ii) The base product can also be packed in HMHDPE containers of 50 L capacity.glass jar can be stored under ambient temperature
- iii) The product is microbiologically is stable

Dehydrated coriander is mainly used as a spice in culinary preparations for imparting a characteristic fresh coriander flavor. It is a ready to use preparation that can be used in place of fresh coriander in homes, restaurants and institutional catering.

RAW MATERIAL

Freshly harvested coriander foliage is the major raw material require. It is preferable to obtain coriander variety less green colour in nature and rich in volatile oil content which is usually in the range of 0.05 to 0.1% in the fresh foliage. The foliage must be of good quality, free from mould growth, insect infestation and discoloration. The other raw materials required in lesser quantity are common salt and colour fixing agent such as food grade Na₂Co₃.

PLANT AND MACHINERY

List of equipment's

Principal equipment's: Soaking tanks, Steam jacketed kettle, and LHA drier

Auxiliary equipment: Preparation tables, Boiler, Trolleys, weighing machine, Holding vessels and miscellaneous items.

PROJECT COST – FIXED COST – WORKING CAPITAL (in Rs. '000) (estimate for a model project)

a) b) c) d) e)	Land & Land development (500 m ²) Building and civil works (100 m ²) Plant and machinery Miscellaneous fixed assets Pre-operative expenses Total fixed capital Working capital margin Total Project cost Total working capital required at 15% of turnover	500.00 2025.00 2926.00 200.00 279.00 5930.00 735.00 6665.00 999.00
	Means of finance - Promoters contribution - Term loan	2529.00 4272.00

PRODUCTION CAPACITY-(estimate)

Suggested economic capacity: 75 Kg /day (1000kg raw material) Working : 1 shift/day, 300 working days/year Capacity : 27 Tonnes /annum Optimum utilization capacity: 70%

TECHNOLOGY/MANUFACTURING PROCESS – Availability

The technology for the manufacture of dehydrated coriander has been developed at CFTRI, Mysore, using appropriate equipment for optimal product recovery of right quality. The CFTRI has the necessary expertise to provide technical assistance and guidance for setting up the project. The CFTRI can offer further technical assistance for project implementation under technical consultancy arrangements.