MCX
METAL & ENERGY
Trade with Trust

MENTHA OIL

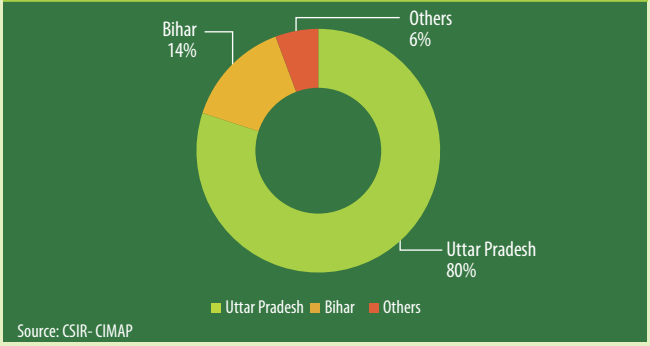


Mentha oil is derived by steam distillation of Mentha arvensis (a Japanese mint) leaves, the basic raw material required for the production of menthol. In India, there are two types of menthol: crystals and flakes. Menthol is available in different shapes and sizes, such as large crystals (bold), medium crystals, small crystals, and flakes as powder. Menthol crystals are the basic ingredients for toothpaste, mouth freshners, pharmaceuticals, ayurvedic and Unani medicines, chewing tobacco, pan masala, pain balm, confectioneries, cosmetics, and fragrance industry.

CROP OVERVIEW

- The sowing season of mentha starts during February–March every year. The crop takes 90 days to mature (vegetative) and produces its first flowers then. This is the best stage to harvest. The crop harvesting is done during May and June.
- Mentha leaf is a commercial part of the plant, including young flower buds, which contain volatile mentha oil. Its leaves are sun-dried for higher oil yields.
- Leaves and flowering tops give the highest yield. Distillation of dried leaves is cheaper than that of fresh leaves.
- Through steam distillation and filtration, a golden yellow volatile oil is obtained. Menthol flakes can be separated in a crystalline form on cooling the oil. The remaining (de-mentholized) oil is used in confectioneries and flavouring.
- The manufacture of menthol flakes is commercially done by a few firms in Delhi, Mumbai, and Gujarat. There are several small distilleries in UP that produce menthol flakes and de-mentholized oil.
- Major mentha oil markets in UP are Chandausi, Sambhal, and Barabanki. Distilled mentha oil is brought into these markets by farmers and producers to commission agents. According to their requirements, mentha processors, crystal manufacturers, and exporters purchase the oil from the market.

STATEWISE SHARE IN TOTAL PRODUCTION



Source: CSIR- CIMAP

INDIA – MENTHA OIL PRODUCTION

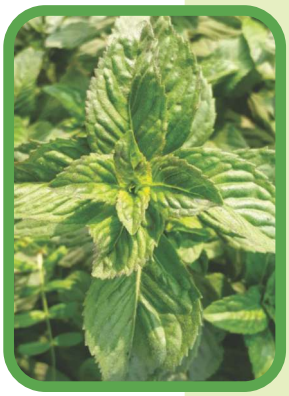
YEAR	Production (tonnes)
2017-18	33,000
2018-19	34,000
2019-20	44,000
2020-21	46,000
2021-22#	39,000

Source: Department of Agriculture and Farmers' Welfare | #: estimate

MAJOR MENTHA OIL PRODUCING DISTRICTS

State	District
Uttar Pradesh	Barabanki
	Moradabad, Rampur,
	Bareilly, Sambhal,
	Badayun
Bihar	Begusarai
	Buxar

Source: Trade estimates





DEMAND AND SUPPLY

- The global production of mentha oil stands at around 48,000 metric tonnes (MT). In India, the production of mentha oil was about 39,000 MT, covering an area of around 3.36 lakh hectares with an average productivity of around 116 kg per hectare during 2022.
- India is the largest producer and exporter of mentha oil. At present, the major producers of mint oil in the world are India (80%), China (09%), Brazil (7%), and the U.S. (4%).
- Mentha arvensis is cultivated in semi-temperate regions of the Himalayan hills—UP, Himachal Pradesh, Punjab, and Bihar.
- India cultivates about eight species of mentha, out of which three are exported. Spices Board of India pegs total exports of mentha and allied products in 2021–22 at 36,254 MT (valued at ₹4441 crore).
- India exports different types of mint oil to countries including China, the U.S., Singapore, the Netherlands, Germany, the UK, France, Brazil and Japan. The major export varieties include the Japanese mint oil (derived from Mentha arvensis), peppermint oil (Mentha pipertia), de-mentholized Japanese mint oil, spearmint (Mentha spicata), water mint oil (Mentha aquatica), horsemint oil (Mentha sylvestries), and Bergemont oil (Mentha citrate).

FACTORS INFLUENCING THE MARKET

International

- Import demand from major importing countries such as China, the U.S., and Singapore.
- USD–INR rate, the commodity being export-oriented.
- Price of synthetic mentha oil in international market.

Domestic

Production related

- Mentha oil price is influenced by an increase or decrease in the mentha crop acreage, which depends on the climate during sowing and the price realization in the previous season.
- Prevailing weather conditions; the incidence of cold wave and heavy rains are harmful during leaf formation.
- Quantum of arrivals during the harvest season.

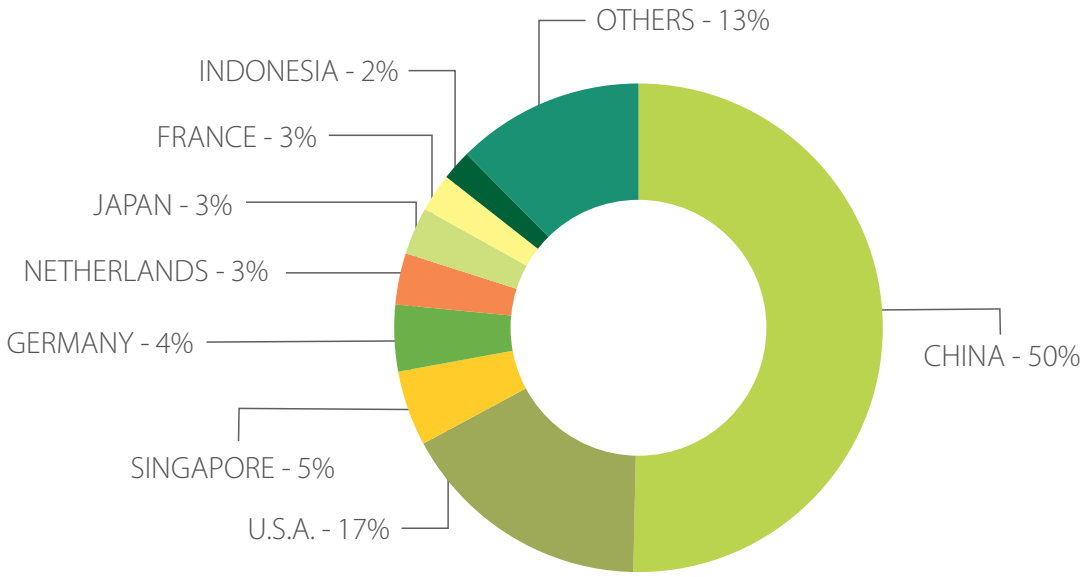
Consumption

- Domestic demand from pharmaceutical companies which usually increases in winter.
- Export demand from importing countries.

Stocks

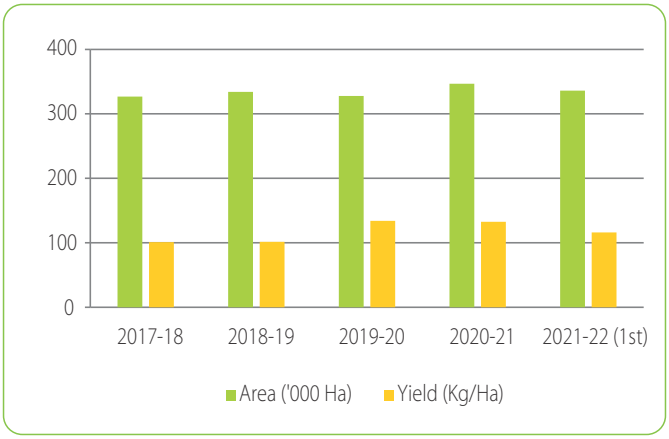
- Mentha oil stocks in MCX-accredited warehouses, carry forward stocks, and stocks available with farmers are key indicators of supplies and influence prices.

Countrywise mentha exports - 2021–22 (Est)

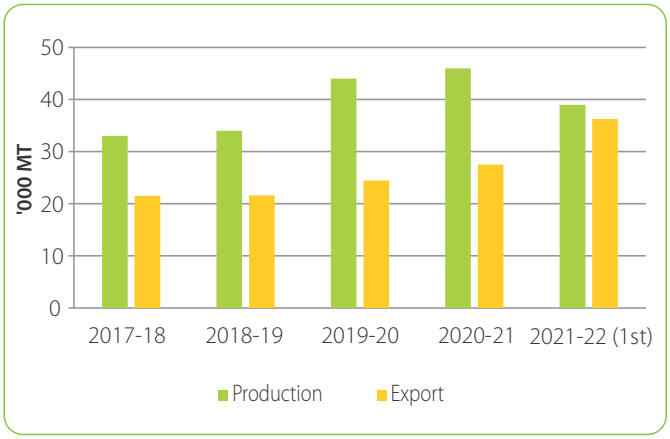


Mentha oil

Mentha - Area and Yield



Mentha Oil & Products - Production & Export



Mentha Oil - Near Month Future Price



CONTRACTS SPECIFICATIONS OF MENTHA OIL FUTURES (May 2023 expiry onwards)

SYMBOL	**MENTHAOIL**
Description	MENTHAOILMMMYY
Contract listing	Contracts are available as per the Contract Launch Calendar.
Contract start day	1st day of contract launch month. If 1st day is a holiday then the following working day.
Last trading day	Last calendar day of the contract expiry month. If last calendar day is a holiday then the preceding working day.
TRADING	
Trading session	Monday to Friday: 9.00 a.m. to 5.00 p.m.
Trading unit	360 kg - 2 drums
Quotation/ Base value	1 kg
Price quote	Barabanki, Chandausi, Sambhal and Rampur, Uttar Pradesh with equal weightage, as is given in the calculation of Due Date Rate (Inclusive of Mandi Tax, but exclusive of all taxes, purchase tax/ sales tax/ GST, if applicable and levies).
Maximum order size	18000 kg (100 drums)
Tick size	10 paise (Minimum Price Movement)
Daily price limits	DPL shall have two slabs - Initial and Enhanced Slab. Once the initial slab limit of 4% is reached in any contract, then after a period of 15 minutes, this limit shall be increased further by enhanced slab of 2%, only in that contract. The trading shall be permitted during the 15 minutes period within the initial slab limit. After the DPL is enhanced, trades shall be permitted throughout the day within the enhanced total DPL of 6%.
Initial margin*	Minimum 12% or based on SPAN whichever is higher
Extreme Loss Margin	Minimum 1%
Additional and / or Special Margin	In case of additional volatility, an additional margin (on both buy & sell side) and/ or special margin (on either buy or sell side) at such percentage, as deemed fit, will be imposed in respect of all outstanding positions.
Maximum allowable open position	For individual clients: 195 MT For a member collectively for all clients: 1950 MT or 15% of the market wide open position, whichever is higher. Near Month Limits For individual clients: 48.75 MT Near month member level position limit shall be equivalent to the one fourth of the overall member level position limit

CONTRACTS SPECIFICATIONS OF MENTHA OIL FUTURES (May 2023 expiry onwards)

DELIVERY

Delivery unit	360 kg / 12 drums (with a tolerance limit of 1% per drum) and direct multiples thereof, though he will get the value only for the actually quantity delivered by him.
Delivery period margin**	Delivery period margins shall be higher of: **a.** 3% + 5 day 99% VaR of spot price volatility Or **b.** 25%
Delivery centre(s)	At Exchange designated warehouse at Barabanki
Additional delivery centre(s)	None
Quality specifications	Natural Crude Mentha Oil (*Arvensis*) confirming to the following quality specifications
	• **Appearance:** Clear liquid • **Colour:** Pale yellow
	• **Odor:** Characteristics of Mentha arvensis • **Optical Rotation (°):** -32° to -36°
	• **Specific gravity (at 25°C):** 0.80 to 0.91 (at 25°C) • **Refractive Index (at 25°C):** 1.42 - 1.48
	• **Solubility in 70% Ethanol at 25°C:** Soluble (1:4 to 6 vol. in 70% alcohol)
	• **L- Menthol:** 73% as per GLC test – Capillary column Acceptable upto 67% with 1:1 discount Above 73% with 1:1 premium
	• **Terpene:** Max 8% • **Menthyl Acetate:** 1.8% to 3.5%
	• **Total Menthol contents:** Minimum 78%
	• **Neo Menthol:** 1.8% to 3.0%
	• **Total Menthones:** 9 to 13% • **Pulegone:** Max 1.6%
	• **High Boilers:** Max 2.0% • **Water and Solid Sediments:** 0.65%
	• **DL - Menthol:** Nil
	It should be free from any admixture such as edible oil, petroleum, mineral oil, sediments, etc. In order to check adulteration, water test, paper test and alkali test will also be conducted, which should confirm to be negative.
Packing	Mentha oil for delivery would be accepted in brand new galvanized iron container with minimum drum weight of 21 kg containing 180 kg of Mentha oil of specified quality. The cost of container, as fixed by the Exchange, will be payable by the buyer.
Due Date Rate (Final Settlement Price)	For contracts where Final Settlement Price (FSP) is determined by polling, unless specifically approved otherwise, the FSP shall be arrived at by taking the simple average of the last polled spot prices of the last three trading days viz.,E0 (expiry day), E-1 and E-2. In the event the spot price for any one or both of E-1 and E-2 is not available; the simple average of the last polled spot price of E0,E-1, E-2 and E-3, whichever available, shall be taken as FSP. Thus, the FSP under various scenarios of non-availability of polled spot prices shall be as

Scenario	Polled spot price availability on				FSP shall be simple average of last polled spot prices on:
	E-0	E-1	E-2	E-3	
1	Yes	Yes	Yes	Yes/No	E-0, E-1, E-2
2	Yes	Yes	No	Yes	E-0, E-1, E-3
3	Yes	No	Yes	Yes	E-0, E-2, E-3
4	Yes	No	No	Yes	E-0, E-3
5	Yes	Yes	No	No	E-0, E-1
6	Yes	No	Yes	No	E-0, E-2
7	Yes	No	No	No	E-0

In case of non-availability of polled spot price on expiry day (E0)/predetermined number of days due to sudden closure of physical market under any emergency situations noticed, Clearing Corporation shall decide further course of action for determining FSP and which shall be in accordance with MCXCCL circular no. MCXCCL/SPOT/077/2020 dated April 13, 2020.

For the purpose of computation of DDR spot prices the following mandis with equal weightage will be considered: Barabanki; Chandausi; Sambhal; Rampur

Provided spot prices of Chandausi, Sambhal and Rampur will be considered after excluding Rs 2 per kg from each centre.

Delivery Logic	Compulsory

Note:Please refer to the exchange circulars for latest contract specifications

* A) The Margin Period of Risk (MPOR) shall be in accordance with SEBI Circular no. SEBI/HO/CDMRD/DRMP/CIR/P/2020/15 dated January 27, 2020. For applicable minimum MPOR, refer latest circulars issued by MCXCCL from time to time.

B) For all the applicable margins, refer the latest circulars issued by the Exchange or Multi Commodity Exchange Clearing Corporation Limited (MCXCCL) from time to time.

** Delivery Period Margin-As per SEBI directive SEBI/HO/CDMRD/DRMP/CIR/P/2016/77 dated Sep 01, 2016.

Content by: **PMT-Agri, MCX** | Designed by: **Graphics Team, MCX**

Please send your feedback to: **mcxpkmt.agri@mcxindia.com**
Corporate address: **Exchange Square, Chakala, Andheri (East), Mumbai - 400 093, India, Tel. No. 91-22-6731 8888**
CIN: L51909MH2002PLC135594, info@mcxindia.com, www.mcxindia.com

MCX METAL & ENERGY Trade with Trust

0323

This leaflet is not intended as professional counsel or investment advice, and is not to be used as such. While the exchange has made every effort to assure the accuracy, correctness and reliability of the information contained herein, any affirmation of fact in the leaflet shall not create an express or implied warranty that it is correct. This leaflet is made available on the condition that errors or omissions shall not be made the basis for any claims, demands or cause of action. MCX shall also not be liable for any damage or loss of any kind, howsoever caused as a result (direct or indirect) of the use of the information or data in this leaflet.
©MCX 2019. All rights reserved. No part of this document may be reproduced, or transmitted in any form, or by any means - electronic, mechanical, photocopying, recording, scanning, or otherwise - without explicit prior permission of MCX.
Read the Risk Disclosure Document (RDD) carefully before transacting in commodity futures and options.

FOLLOW US ON

@MCXIndialtd Multi Commodity Exchange of India Ltd.