

**REFINERY MOLASSES (B2B)**

United Sugar Company's **REFINERY MOLASSES** is a by-product of refining cane raw sugar in the Company's Refinery in Jeddah. The process from which it is derived meets the Country of Origin Food and Legislative standards.

Refinery Molasses is considered superior to similar products derived from either the sugar cane milling or the sugar beet refining process. The characteristics listed below are indicative for the product being offered to users.

CRITERIA VALUE ONLY	DESCRIPTION	TYPICAL
Appearance	Dark Brown to black viscous liquid complies	
Taste & Odour	Typically "Molasses" taste with few background odours complies	
Total Sugars	% w/w (ICUMSA)	70 max
Total Solids (TS)	Brix (ICUMSA)	76 -80
Ash	% w/w (ICUMSA)	12 max
Protein Equivalent	% w/w	3.5
Mineral Constituents		
Potassium	% w/w	3.5
Calcium	% w/w	0.7
Magnesium	% w/w	0.5
Sodium	% w/w	0.1
Phosphate	% w/w	2.4
Chloride	% w/w	1.3
Metallic Constituent		
Iron	mgm/kg	200
Zinc	mgm/kg	30
Manganese	mgm/kg	20
Copper	mgm/kg	9

**Uses:**

- An ingredient for animal feed.
- Binder and dust control in pelletized feeds
- Fermentation feed stock.
- Various industrial applications.

**Product Hazard and Safety Information:**

No product hazard or safety classifications have been identified  
No known Materials Safety Data Sheet (MSDS) has been published.

**Storage:** Refinery Molasses does not present any particular storage problems when stored in covered, dry ambient conditions. After packaging, drums should be monitored for gassing which may be due to changes to the chemistry of the product particularly those with lower total solids (TS).

Bulk storage temperatures must be maintained below 40° C to prevent product decomposition and degradation of colour.

**Spillage:** Molasses spills, along with those of all sucrose products present effluent management problems, specifically of high colour and microbiological degradation. Spills make surfaces slippery to wheeled traffic.

Any spills should be contained and absorbed using sand, recovered by mechanical means, and disposed in approved land fill. Final clean-up should be by dilution with minimum use of water, recovery of the washings and disposal to approved sites.

**Engineering:**

## 1. Materials of Construction

Mild steel materials of construction are acceptable, but corrosion-resistant or stainless steel are preferred. Particular attention should be paid to the microbiological, environmental and effluent consequences of wet-cleaning process lines and product handling areas.

## 2. Some Engineering values

Specific Gravity	1.40 – 1.45
pH	4 - 5
Viscosity centipoises @ 20 °C	20,000 Typical value

**Packaging:**

Refinery Molasses is available in:  
Bulk deliveries of between 10 and 30 tones supplied to Customer's Transport  
(Top loaded into a tanker manhole)