

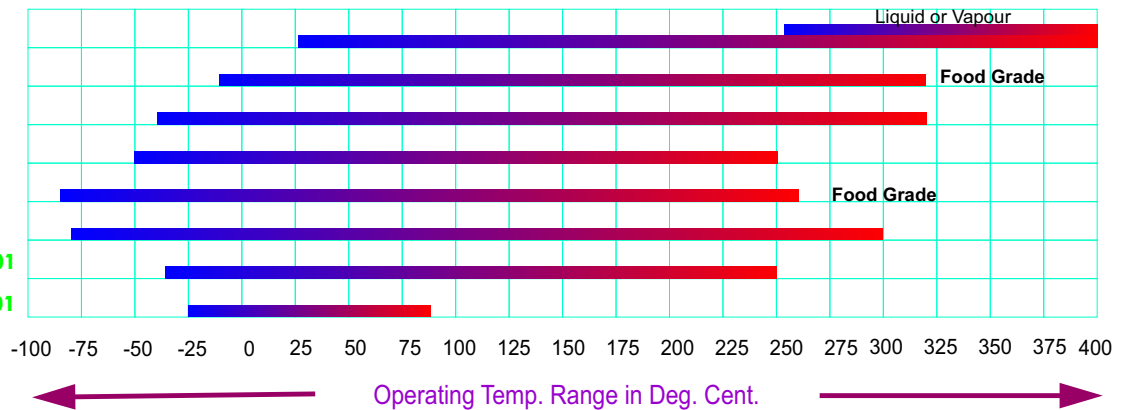
Food Grade Recuperation Fluid (Hexane Recovery Oil) for Edible oil Solvent Extraction Plants



sigma FG - 10

Thermic Fluid and other Speciality Range

- sigma THERM[®] - A
- sigma THERM[®] - F
- sigma THERM[®] - K
- sigma THERM[®] - N
- sigma THERM[®] - P
- sigma THERM[®] - S
- sigma THERM[®] - FF 101
- sigma THERM[®] - FF 201

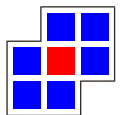


ISO 9001

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www.shreyas.in

Description :

sigma FG - 10 is thermally stable ultra pure Food Grade Lubricant.

sigma FG - 10 Food Grade Lubricants are specially formulated with all ingredients meeting requirements mentioned under chapter 21 CFR, 178.3570 of US FDA

sigma FG - 10 is registered with NSF for H1 grade Lubricants
H1 – Incidental Food Contact – Highest safety



Non Food Compounds
Program Listed (H1)
Reg. No. 148460

Application :

sigma FG - 10 can be used for lubrication purpose for machineries in below given industries.

- ✦ Edible Oil Refinery
- ✦ Sweets Processing Facility
- ✦ Dairy Processing Facility
- ✦ Divider oils
- ✦ Herbs Processing Facility
- ✦ Bakery Processing Facility
- ✦ Distillery
- ✦ Dust Suppression
- ✦ Confectionery items
- ✦ Restaurants
- ✦ Spices
- ✦ Recuperation oil for Edible Oil Solvent extraction Plants

sigma FG - 10 meets Highest Safety Standers for Food Industries and fit perfectly in HACCP (Hazard Analysis and Critical Control Point) and GMP (Good Manufacturing Practice) plans.

Typical Properties :

Property	sigma FG - 10
Appearance	Bright and Clear Liquid
Density Kg/L @ 15° C	0.835
Kin. Vis. @ 40° C	10-12
Kin. Vis. @ 100° C	3
Vis. Index	100
Flash Point °C	175
Pour Point °C	-12

Packing : 210 Ltrs.

What Quality and properties should a perfect Recuperation / Hexane Recovery Oil should have ?

A perfect Recuperation / Hexane Recovery Fluid should have below given properties.

■ Lowest Possible Kinematic Viscosity.

Lower Kin. Vis. of the fluid provides higher flow rate and reduces load on circulation pump. Absorption of Hexane is at much more faster rate in lower Kin. Vis. grade Fluid. And Heat transfer speed of the fluid is also very high due to lower vis. **sigma FG - 10** has got very low Kin. Vis. of 10cSt @40°C

■ High Hexane Absorption Capacity

Basic purpose of the fluid is to absorb Hexane into it. Fluid's chemistry should be such that it can absorb maximum amount of Hexane in it. Generally used lubricating oil is a mixture of various chemistries with varying hexane absorption capacity. At the same time additives used into the same reduces hexane absorption capacity. **sigma FG - 10** has got perfect chemistry for this application. **sigma FG - 10** has got highest Hexane absorption capacity as compared to other oils used for this application

■ Should be a Food Grade

sigma FG - 10 is the only Food Grade product in Indian Market design properly for Hexane recovery in Solvent Extraction plant

■ Should be Thermally Stable.

Recuperation oil is subjected to higher temperature and lower temperature in operation. Fluid used for this application should be Thermally stable to withstand this thermal shock. Molecule of **sigma FG - 10** is such that as compared to generally used product it has got higher Thermal Stability.

■ Should have longer working life.

Due to economic reason higher working life of fluid is always desirable. **sigma FG - 10** will have higher working life as compared to generally used fluids due to above mentioned reasons.

■ Should be Economical

Rate of **sigma FG - 10** is very competitive even though it is a perfect Food Grade fluid to be used as Recuperation oil / Hexane Recovery Fluid.

Note : Above data is for reference only

Liability Disclaimer : This information and our technical advice – whether verbal, in writing or by way of trials – are given in good faith but without warranty, and this also applies where proprietary rights of third parties are involved. Our advice does not release you from the obligation to verify the information currently provided – especially that contained in our safety data and technical information sheets – and to test our products as to their suitability for the intended processes and uses. The application, use and processing of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely your own responsibility. Our Products are sold in accordance with the current version of our General Conditions of Sale and Delivery.



Nonfood Compounds
Program Listed

October 17, 2013

Mr. Rahul G. Nasit (Patel)
Shreyas Petroleum Additives Limited
2 Hiranya Complex
Sardar Patel Chowk, Vastrapur
Ahmedabad 380015
India

RE: sigma FG 10
Category Code: H1
NSF Registration No. 148460

Dear Mr. Rahul G. Nasit (Patel):

NSF has processed the application for Registration of **sigma FG 10** to the NSF International Registration Guidelines for Proprietary Substances and Nonfood Compounds (2009), which are available at www.nsfwhitebook.org. The NSF Nonfood Compounds Registration Program is a continuation of the USDA product approval and listing program, which is based on meeting regulatory requirements including FDA 21 CFR for appropriate use, ingredient and labeling review.

This product is acceptable as a lubricant with incidental food contact (H1) for use in and around food processing areas. Such compounds may be used on food processing equipment as a protective anti-rust film, as a release agent on gaskets or seals of tank closures, and as a lubricant for machine parts and equipment in locations in which there is a potential exposure of the lubricated part to food. The amount used should be the minimum required to accomplish the desired technical effect on the equipment. If used as an anti-rust film, the compound must be removed from the equipment surface by washing or wiping, as required to leave the surface effectively free of any substance which could be transferred to food being processed.

NSF Registration of this product is current when the NSF Registration Number, Category Code, and Registration Mark appear on the NSF-approved product label, and the Registered product name is included in the current NSF White Book Listing of Nonfood Compounds at the NSF website (www.nsfwhitebook.org).

NSF Listing of all Registered Nonfood compounds by NSF International is not an endorsement of those compounds, or of any performance or efficacy claims made by the manufacturer.

Registration status may be verified at any time via the NSF website, at www.nsfwhitebook.org. Changes in formulation or label, without the prior written consent of NSF, will void Registration, and will supersede the on-line listing.

Sincerely,

Amanda Phelka
NSF Nonfood Compounds Registration Program

Company No: C0089719