



Global Specialty Ingredients

PRODUCT LIST

Issued On 01/01/2014



Product List Summary

Product Category	Products \ Brand Name
Functional Ingredients	HIFED MF-18
Functional Ingredients	SY-Glyster THL-17
Processing Aids and adsorbents	D-SOL D60
Processing Aids and adsorbents	Dalsorb 3000M
Processing Aids and adsorbents	D-SOL 300R
Processing Aids and adsorbents	MAGNESOL R60 & XL
Processing Aids and adsorbents	HAZEOUT®
Functional Ingredients	Palmos™ Cre'meBerg
Functional Ingredients	Palmos™ CGX
Functional Ingredients	Palmos™ Dexal
Functional Ingredients	Palmos™ GX
Functional Ingredients	Palmos™ GD
Functional Ingredients	Palmos™ FrozMet
Functional Ingredients	Palmos™ Maqual
Functional Ingredients	Palmos™ CakeIMP
Functional Ingredients	Palmos™ PETSTAB
Functional Ingredients	GLO 60
Functional Ingredients	SILICONE ANTIFOAM 2000 P.
Functional Ingredients	SILICONE OIL.
Functional Ingredients	SILICONE OIL – FOOD GRADE.
Functional Ingredients	SILICONE ANTIFOAM 30 P.



Product Name:

HIFED MF-18

Product Statement :

HIFED MF-18 is a modified Poly glycerol ester (PGE), which demonstrating crystal phase properties that are more favorable to the formation of very stable gel network structures, shows very good performance as an Anti-Clouding Agent or Anti Crystallization Agent in the Vegetable oil, Biodiesel and Oleo-chemical industry.

Benefits:

- The addition of **HIFED MF-18** as an anti-crystallization agent delays crystal formation which indirectly improves the clarity of the oil.
- The addition of **HIFED MF-18** also does not influence the Peroxide Value (PV) of oil.
- The addition of **HIFED MF-18** also does not introduce any specific or additional flavor to the oil as this ingredient has no flavor.
- The addition of **HIFED MF-18** also will slow down the crystals growth if there is any form of crystal formation.
- The addition of **HIFED MF-18** also would not increase Peroxide Value in cooking oil during blending process.
- The addition of **HIFED MF-18** also would help to reduce Cloud Point (CP) and Solid Fat Content (SFC) at 20°C.

Application:

HIFED MF-18 is suitable to use as an Anti-Clouding Agent or Anti Crystallization Agent in the Vegetable oil, Biodiesel and Oleo-chemical industry.

Dosage:

Addition of 0.2-0.3% of **HIFED MF-18 (PGE)** is very effective at 18°C and remained clear for 3 months and 20°C for 6 months.

Certifications :

HIFED MF-18 is being certifies for following standards and Certifications:- Halal Cert, Kosher Cert, Health Cert, ISO 9001, ISO14000, Allergen Declaration, Declaration of Radioactivity Level, CFR Part 21 Declaration, FDA Declaration and certification of Standards of Food Additives in Japan.



Product Name:

SY-Glyster THL-17

Product Statement:

SY-Glyster THL-17 is Poly glycerol ester (PGE), which exhibit crystal phase properties that are more favorable to the formation of very stable gel network structures in winter climate, shows very good performance as Anti clouding Agent or Anti Crystallization Agent in the Vegetable oil, Biodiesel and Oleo-chemical industry for lower temperature.

Benefits:

- The addition of **SY-Glyster THL-17** as an anti-crystallization agent delays crystal formation which indirectly improves the clarity of the oil.
- The addition of **SY-Glyster THL-17** also does not influence the Peroxide Value (PV) of oil.
- The addition of **SY-Glyster THL-17** also does not introduce any specific or additional flavor to the oil as this ingredient has no flavor.
- The addition of **SY-Glyster THL-17** also will slow down the crystals growth if there is any form of crystal formation.
- The addition of **SY-Glyster THL-17** also would not increase Peroxide Value in cooking oil during blending process.
- The addition of **SY-Glyster THL-17** also would help to reduce Cloud Point (CP) and Solid Fat Content (SFC) at below 0°C.

Application:

SY-Glyster THL-17 is suitable to use as an Anti-Clouding Agent or Anti Crystallization Agent in the Vegetable oil like Soya bean Oil, Sun Flower Oil, Rape seed Oil, Canola Oil, Biodiesel and Oleo-chemical industry.

Dosage:

Addition of 0.2-0.3% of **SY-Glyster THL-17** (PGE) is PGE is very effective at less than 10°C and remained clear for 5 days at 0°C.

Certifications:

SY-Glyster THL-17 is being certifies for following standards and Certifications: - ISO 9001 and ISO14000.



Product Name:

D-SOL D60

Product Statement:

D-SOL® is a registered trademark of The Dallas Group of America, Inc. for a synthetic, amorphous, hydrous form of magnesium silicate. With a porous internal structure and enormous activated surface, **D-SOL®** products are ideal for use as adsorbents, anti-static flow agents, anti-caking agents, catalyst supports, carriers, and reinforcing fillers.

Benefits:

D-SOL® treated biodiesel contained a lower soap and metal content than the water washed and dried sample. The oxidative stability of the washed and dried methyl ester was only 0.49 hours compared to 2.25 hours for the **D-SOL®** treated biodiesel.

The other benefits of **D-SOL®** are:-

- No water effluent stream is needed as wet washing step is eliminated.
- No emulsification will be taking place as water is not introduced to Methyl Ester.
- Improve Oxidative Stability (OSI) of biodiesel with **D-SOL®** treatment.
- Minimal yield loss as Methyl Ester wet washing step is omitted.
- Minimal capital expenditure employed as wet washing step is removed from Biodiesel Production processes.
- Exclusion of Methyl ester wet washing process allows for continuous operation.
- Biodiesel purification process can be expedited.
- Removal of Sterol Glucosides and Glycerine can be executed successfully.
- Reprocessing of off-spec material can be carried out to recover production lost.
- Reduce acid value and FFA.
- Removable of Trace Metals can be performed.
- Improve the clarity of the end product.

Application:

D-SOL® is suitable to use in the Biodiesel, Diesel and Solvents industry.

Dosage:

Dosage of 0.5 to 2.0% **D-SOL®** D60 w/w to be used in the unwashed Biodiesel (Methyl Ester) at 70°C. Need to allow a reaction time of 20-30 minutes to let the impurities and water adsorbed by the adsorbents before the biodiesel mixture has been filtered.

Certification:

D-SOL® range products are being certified for following standards and Certifications:- Halal Cert, Kosher Cert, FDA GRAS Declaration, REACH NATION declaration and certification of Standards of Food Additives in Japan.



Product Name: **Dalsorb 3000M**

Product Statement:

The **DALSORB® M** series is based on a synthetic, amorphous, hydrous form of magnesium silicate. **DALSORB® M** series products are ideal for use as adsorbents, antistatic flow agents, anti-caking agents, catalyst supports, carriers, and reinforcing fillers. **DALSORB® M** is a pure white, odorless powder designed to remove the impurities which form in edible oils during industrial frying processes. Its narrow particle size distribution results in superior filtration characteristics. **DALSORB® M** is GRAS and acceptable to the USDA and FDA for filtration of used frying oils.

Benefits:

Daily treatment of oil used for frying, fully cooked, bone-in, battered chicken with **DALSORB®** resulted in:

- 91% Reduction of Free Fatty Acids
- 86% reduction of Alkaline materials formed during the
- 70% Reduction in Colors formed during the frying
- 47% Reduction in Total Polar Materials
- 20% Reduction in Polymeric Triacylglycerides
- Reduction in metals (Na, K, P, Mg and Si)
- Continued frying operation with No oil discard and
- No smoke in the frying room.

Application:

DALSORB® M series is suitable to use in the Vegetable Oil and Frying Oil industry.

Dosage:

Dosage of 0.5 to 2.5 % **DALSORB® M** w/w to be used in the heated oil (82°C – 122°C). Need to allow a reaction time of 20-30 minutes to let the impurities adsorbed by the adsorbents.

Certification:

DALSORB® M range products are being certified for following standards and Certifications: - Halal Cert, Kosher Cert, FDA GRAS Declaration, REACH NATION declaration and certification of Standards of Food Additives in Japan.



Product Name:

D-SOL 300R

Product Statement:

D-SOL® is a registered trademark of The Dallas Group of America, Inc. for product based on a synthetic, amorphous, hydrous form of magnesium silicate. **D-SOL® 300R** is a pure white, odorless powder designed to adsorb acids and other impurities. Its narrow particle size distribution results in superior filtration characteristics. **D-SOL® 300R** is GRAS. This absorbent were being used in Vegetable oil, Fraying, Oleochemical and other industry.

Benefits:

- Removes soluble degradation products by attracting polar products and holds them for removal in filter.
- Slows oil degradation.
- Acts as depth filter.
- Higher quality fried foods.
- Extend life of Frying oil.
- Reduction in oil use
- Potential elimination of oil discard.
- Reduce downtime.
- Reduce energy usage.
- Reduce cleanup costs.
- Improves finished product quality and shelf stability.

Application:

D-SOL® R series is suitable to use in the Vegetable Oil and Frying Oil industry.

Dosage:

Dosage of 0.5 to 2.5 % **D-SOL® 300R** w/w to be used in the heated oil (82°C – 122°C). Need to allow a reaction time of 20-30 minutes to let the impurities adsorbed by the adsorbents.

Certification:

D-SOL® R range products are being certifies for following standards and Certifications: - Halal Cert, Kosher Cert, FDA GRAS Declaration, REACH NATION declaration and certification of Standards of Food Additives in Japan.



Product Name: **MAGNESOL R60 &
MAGNESOL XL.**

Product Statement: **MAGNESOL®** is a registered trademark of The Dallas Group of America, Inc. for a synthetic, amorphous, hydrous form of magnesium silicate. With a porous internal structure and enormous activated surface, **MAGNESOL** series products are ideal for use as purification, adsorbents, anti-static flow agents, anti-caking agents, catalyst supports, carriers, and reinforcing fillers. This adsorbent were being used in Vegetable oil, Fraying, Oleo-chemical and other industry.

Benefits:

- 80% Reduction of Free Fatty Acids.
- 70% Reduction in Colors.
- 47% Reduction in Total Polar compound.
- 20% Reduction in Polymeric Triacylglycerides and Diglyceride.
- 70% Reduction in Peroxide value (PV).
- Reduction in metals(Fe, Cu Na, K, P, Mg and Si).
- Increase Rancimat value by 15 %.
- Off spec quality oil can be treated in small quantity whereas large quantity needed to be refined in a Refinery.
- No color reaction including other parameters after treatment.
- Longer shelf life of frying oil due to increase in Rancimat Value.
- Easy to handle and is food grade, no odor, Halal and kosher certified.
- Quality of the oil assured for customer acceptance.

Application: **MAGNESOL®** series is an adsorbent being used in Vegetable oil, Fraying, Oleochemical industry.

Dosage: Dosage of 0.5 to 1.0 % **MAGNESOL®** series product w/w to be used in the heated oil (80⁰C– 90⁰C). Need to allow a reaction time of 20-30 minutes to let the impurities adsorbed by the adsorbents.

Certification: **MAGNESOL®** range products are being certifies for following standards and Certifications: - Halal Cert, Kosher Cert, FDA GRAS Declaration, REACH NATION declaration and certification of Standards of Food Additives in Japan.

**Product Name:****HAZEOUT®****Product Statement:**

HAZEOUT® is the registered trademark of The Dallas Group of America, Inc. for a synthetic, amorphous, hydrous form of magnesium silicate. It is a fine, pure white, odorless, tasteless powder that is manufactured to meet the specifications for synthetic magnesium silicate of the Food Chemicals Codex VI and the National Formulary 27. With a porous internal structure and enormous activated surface, **HAZEOUT®** is recommended for chill stabilization of beer, wine, and other fruit or vegetable based beverages. Its narrow particle size distribution results in superior filtration characteristics.

Benefits:

Increased production rates for longer filtration cycles and decreased pressure drop.

No need for swell time.

Iron removal for better stability and longer shelf life.

HAZEOUT® has 1 year shelf life.

No special handling required. No mold concerns.

Outperforms silica gels and xerogels on quality parameters.

Reduce or eliminate Kieselguhr usage.

Longer shelf life with lower overall chill Haze.

Application:

HAZEOUT® is recommended for chill stabilization of beer, wine, and other fruit or vegetable based beverages.

Dosage:

Dosage of 50ppm to 100ppm, **HAZEOUT®** to be used per treatment. Need to allow a reaction time of 30 minutes to let the reactions occurred in the beverage mixtures.

Certification:

HAZEOUT® range products are being certifies for following standards and Certifications: - Halal Cert, Kosher Cert, FDA GRAS Declaration, REACH NATION declaration and certification of Standards of Food Additives in Japan.

**Product Name:**

**Palmos™ Cre'meBerg 100,
Palmos™ Cre'meBerg 101,
Palmos™ Cre'meBerg B100,
Palmos™ Cre'meBerg S100 &
Palmos™ Cre'meBerg 100-M.**

Product Statement:

Palmos™ Cre'meBerg series as a food grade functional Ingredients for frozen desserts such as ice cream and ice lolly. It contributes towards good mouth feel with chewy properties in frozen desserts. It contains heat shock, melting resistance and stabilizes at low pH value. It prevents the crystallization of water. It also inhibits flavouring and colouring agents from being drawn out from ice water.

Benefits:

- Imparts slow and uniform meltdown.
- Retards ice or lactose crystal growth.
- Improves texture and mouth feel of ice cream.
- Increase whipping properties.
- To stabilize the air bubbles and to hold the flavourings.

Application:

This functional ingredient is suitable to use in Frozen Desserts. Dairy Ice cream, Fresh Fruit Ice cream, Ice Lolly and Frozen Yogurt Desserts are among the desserts that can be improved by using this functional ingredient.

Dosage:

The dosage levels for Ice Cream is 0.30 – 0.45% and for Ice lolly is 0.15 – 0.20% respectively.

Certifications:

Palmos™ Cre'meBerg range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ CGX 110,
Palmos™ CGX C100,
Palmos™ Carradex 100 &
Palmos™ Cre'meCo 100.**

Product Statement:

Palmos™ CGX, Carradex and Cre'meCO series as a food grade functional Ingredients suitable for human consumption which is being used in beverages such as fruit drinks, squash, cordials, chocolate drink, carbonated drinks, champagne, milk based drinks and recombined milk. It is a product that promises the improvement of mouth feels with excellent body profile. It also prevents syneresis. It stabilizes the fruit drink and its pulp. For low pH drinks, it prevents protein from being precipitated at low pH and heating condition.

Benefits:

- Prevents syneresis.
- Stabilizes the fruits' pulp.
- Prevents precipitation of protein at low pH & heating.
- Improves mouth feel and texture.
- Prevents degeneration in beverages.

Application:

This functional ingredient is suitable to use in beverages. Fruit Drinks, Cordials, Chocolate Drinks, Carbonated drinks, Milk- based drinks, Alcoholic - based beverages and 3 in 1 Coffee Pre-mix are among the beverages that can be improved by using this functional ingredient.

Dosage:

The dosage levels for mouth feel is 0.02 – 0.20%, for stabilization 0.20 – 0.50% and for low pH drinks is 0.40 – 0.80% respectively.

Certifications:

Palmos™ CGX, Carradex and Cre'meCO range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ Dexal 100 &
Palmos™ Dexal 200.**

Product Statement:

Palmos™ Dexal series as a food grade functional Ingredients for human consumption which is being used in confectionary such as soft candies, chewy candies, jelly candies, gummy bear types of candies and nougat. A product that promises complete mouth feel and excellent body that will contribute to good gel strength at low dosage. It contains heat resistance profile that is to prevent the melting of candies and wrapper sticking due to high temperature. It also increases the shelf life of the confectionary products by coating up the active compound and hold flavourings.

Benefits:

- High Heat resistance
- Increases shelf live
- Prevent syneresis
- Good gel strength at low dosage
- Prevents wrapper sticking
- Hold flavourings.

Application:

This functional ingredient is suitable to use in Confectionery. Hard Candies, Soft Candies, Jelly candies and Nougat are among the confectionary items that can be improved by using this functional ingredient.

Dosage:

The dosage levels for Hard Candies is 0.30 – 0.50% and for Soft/Chewy Candies is 0.10 – 0.30% respectively.

Certifications:

Palmos™ Dexal range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ GX 100 &
Palmos™ GX 200,**

Product Statement:

Palmos™ GX series as a food grade functional Ingredients suitable for human consumption which is being used in tomato ketchup, chili paste, mayonnaise, mustard, fruits jam and biscuit cream filling. A product that promises complete mouth feel and excellent body that will contribute to high viscosity at low dosage. It also prevents syneresis during storage. The alteration of pH value does not influence the use of **Palmos™ GX** series.

Benefits:

- Complete mouth feel
- High viscosity at low dosage.
- Inhibits syneresis
- Stable at low pH value.

Application:

This functional ingredient is suitable to use in sauces and Jams. Tomato Ketchup, Chili paste, mayonnaise, Fruits Jam and Cream Filling are among the food items that can be improved by using this functional ingredient.

Dosage:

The dosage levels for Jam and sauces are 0.50 – 1.50%.

Certifications:

Palmos™ GX range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ GD 100 &
Palmos™ GD 200,**

Product Statement:

Palmos™ GD series as a food grade functional Ingredients suitable for human consumption which is being used in water gel desserts such as jelly and pudding, ready products and mixing in powder form. A product that promises complete mouth feels with excellent flavor release. It has contributed towards good gel strength at low dosage. It prevents syneresis and provides a strong, rigid and clear gel.

Benefits:

- Prevents syneresis.
- Strong, rigid & clear gel.
- Good gel strength at low dosage.
- Improves mouth feel with excellent flavor release.

Application:

This functional ingredient is suitable to use in Desserts. Jelly, Pudding, and Pre-mix Jelly Powder are among the desserts that can be improved by using this functional ingredient.

Dosage:

The dosage level for water gel dessert is 0.50 – 1.00%.

Certifications:

Palmos™ GD range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ FrozMet 100,
Palmos™ FrozMet 200 &
Palmos™ FrozMet 300.**

Product Statement:

Palmos™ FrozMet series as a food grade functional Ingredients that are being applied in the meat production. The meat products that are applicable are fine paste sausages, hams and emulsified meat products. **Palmos Frozmet** has the ability to mix water well in the meat products and improves the yield and profitability. It improves the quality of the end products by increasing the meats' juiciness, texture and the slicing properties. It inhibits syneresis during storage.

Benefits:

- Improves yield and profitability
- Improves quality
- Increases meat's juiciness & texture
- Increases slicing properties
- Inhibit syneresis.

Application:

This functional ingredient is suitable to use in Meat Products. Sausage, Ham and Emulsified Meat Products are among the Meat products that can be improved by using this functional ingredient.

Dosage:

The dosage levels for meat application are 0.20 – 1.00%.

Certifications:

Palmos™ FrozMet range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ Maqual 105 &
Palmos™ Maqual 115.**

Product Statement:

Palmos™ Maqual series as a food grade functional Ingredients for seafood products, phosphate- free products and emulsified seafood products. It is a user friendly seafood stabilizer that contains excellent emulsifying capacity and cooking / freeze- thaw stability. It improves juiciness, texture and reduces cooking loss. It elevates the pick-up of brine and act as a replacer for phosphates. It improves the texture of seafood products by increasing the binding of fats and water. Product added with **Palmos Maqual** functional ingredients has a better Water Holding Capacity (WHC) that improves the juiciness as well as enhances the freeze-thaw stability. It is very cost efficiency

Benefits:

- Free-thaw stability
- Improves juiciness & texture
- Reduces cooking loss
- Increases binding of fats & water
- Cost Efficiency

Application:

This functional ingredient is suitable to use in seafood products. Fish balls, Crab meat and Squid Balls are among the seafood products that can be improved by using this functional ingredient.

Dosage:

The dosage levels for seafood products are 0.30 – 0.60%.

Certifications:

Palmos™ Maqual range products are being certifies for following standards and Certifications: - Halal Cert.

**Product Name:****Palmos™ CakelMP 100.****Product Statement:**

Palmos™ CakelMP series as a food grade functional Ingredients for bakery product such as cakes, muffins, cookies and chiffon cakes. It promises longer shelf life due to moisture retention. With this characteristic, it is able to find the free water and prevents the microorganisms from growing due to high moisture content. It also increases the aeration and surface area of the end product. Applicable at a low dosage, cost saving is one of the key selling points.

Benefits:

- Extended shelf life
- Moisture retention
- Improves aeration and texture
- Increase surface area
- Cost saving
- To hold the flavorings and active compounds

Application:

This functional ingredient is suitable to use in bakery products. Cake, Pie, Muffins, cookies and bread are among the bakery products that can be improved by using this functional ingredient.

Dosage:

The dosage levels for Bread/ cake is 0.1 – 0.5% and for cookies is 0.1 – 0.3% respectively.

Certifications:

Palmos™ CakelMP 100 is being certifies for following standards and Certifications: - Halal Cert.

**Product Name:**

**Palmos™ PETSTAB 20 &
Palmos™ PETSTAB 30.**

Product Statement:

Palmos™ PETSTAB series as a pet food functional ingredient for canned pet food which is being used for raw and precooked fish meat. It develops durable, strong, tensile and clear heat forming gel traits at a reasonable cost and controls syneresis separation during product storage.

Benefits:

- Durable, strong, tensile and clear heat forming gel.
- Reasonable cost.
- Inhibits syneresis during storage
- Improves water Holding Capacity (WHC)

Application:

This pet food functional ingredient is suitable to use in raw, pre-cooked meat and canned fish pet food.

Dosage:

The dosage levels for canned fish pet food 0.70 – 1.00%.

Certifications:

Palmos™ PETSTAB range products are being certifies for following standards and Certifications: - Halal Cert.



Product Name:

GLO 60

Product Statement:

GLO 60 developed and manufactured from fine raw material of edible fat triglyceride to form crystallization during the process of mixing and production for edible oils and fats application and Food application.

GLO 60 is frequently used to improve crystallization process in fractionation of palm oil; it helps to increase the yield by 0.5 % and clarity of palm olein.

GLO 60 also help to form beta prime crystal formation in short period of time in the same time reduced holding time during crystallization process, while for palm kernel oil, it help to increase the yield and solid fat content of crude palm kernel stearin at 30°C.

GLO 60 also suitable for chocolate spread, Margarine, butter and Peanut to avoid oiling out and oil separation after packing.

Benefits:

- To enhance crystals growth during Crystallization process in fractionation plant.
- Increase Solid Fat Content in Chocolate spread.
- Increase Solid Fat Content in CBS, CBR and CBE.
- Performed well as fat binding process to avoid oil separation.
- Beads form for easy application during summer and winter.
- Enhance grainy structure in vegetable Ghee.

Application:

GLO 60 is suitable to use in palm, coconut and kernel fractionation processes. **GLO 60** also suitable for chocolate spread, Margarine, butter and Peanut to avoid oiling out.

Dosage:

The dosage Level for **GLO 60** is from 0.5 % to 3 % of w/w depending on the oil and fat formulation and 0.2% - 0.3 % for palm and kernel fractionation process. The dosage level of 1 - 2 % is used for chocolate spread, Margarine and Ghee production for grainy structure.

Certifications:

GLO 60 is being certifies for following standards and Certifications: - Halal Cert and Kosher Cert.



Product Name: SILICONE ANTIFOAM 2000 P.

Product Statement:

SILICONE ANTIFOAM 2000 P is a specially developed and premium product containing 100% of a methyl terminated POLYDIMETHYLSILOXANE (1000 centistokes) compounded with silicon dioxide. It is advantageous in certain non-aqueous pharmaceutical manufacturing and most non aqueous food processing applications.

Benefits:

- Chemically inert and nontoxic.
- Good dispersion in non-aqueous systems.
- Effective at low and high temperatures.
- Stable at high temperatures.

Application:

This functional ingredient is:-

- Provides foam control for Over-The-Counter (OTC) anti-flatulent medication.
- Provides foam control in various food categories such as cooking oils, non-standardized cheese products, meat, poultry, seafood, breading and batters, soups, fermentation, starch / potatoes, animal feed, soy / tofu, sugars / jams / syrups and beverages.

Dosage:

The dosage levels of **SILICONE ANTIFOAM 2000 P** are 25ppm to 100ppm active silicone per individual usage or dilution.

Certifications:

SILICONE ANTIFOAM 2000 P is produced in ISO 9001 certified plant. **SILICONE ANTIFOAM 2000 P** has been certified HALAL by the Department of Islamic Development Malaysia in accordance to MS 1500: 2004 since February 2007. This product has also been certified KOSHER PAREVE NON PASSOVER by KASHRUT London Beth Din in accordance to Jewish Dietary Laws (Torah) since April 2008. In addition, this product also complies with the Official Monographs of SIMETHICONE as laid down by the United States Pharmacopeia-National Formulary.



Product Name:

SILICONE OIL.

Product Statement:

SILICONE OIL is a water clear silicone fluid in a wide viscosity range.

Benefits:

The most important features and benefits of this fluid include:

- Little changes in physical properties over a wide temperature range
- The fluid can be used from -40 °C to 280 °C
- Having excellent water repellency
- Low surface tension. The fluid readily wets clean surfaces to impart
- Water repellency and release characteristics
- Low toxicity

Application:

SILICONE OIL is used in wide range of application including:-

- As a release agent
Used purely or as a part of a compounded formula Silicone oil provides a non-toxic, non-carbonizing, mould release for rubber, plastics and metal die-castings.
- As an Anti-Foam agent
Very small quantities of the fluid are very effective as a foam control agent, especially in non-aqueous systems.
- As a mechanical fluid
The very high viscosity-index, the thermal and chemical stability, shear-breakdown resistance and the rubber compatibility as well as the compressibility make this fluid outstanding for mechanical and hydraulic uses.
- As a lubricant
The fluid provides excellent lubricating properties for most plastic and elastomeric surfaces. Lubricity with metals depends upon the possible combinations with other lubricity improvers.
- In polishes and chemical specialties
Silicone oil is used in most automobile and furniture polishes for its ease of application, high gloss with a minimum rubbing and durable water repellent film.
- In electrical and electronic equipment
Because of the excellent dielectric properties silicone oil is widely used as an insulating and damping fluid.

Dosage:

The dosage levels of **SILICONE OIL** are 0.1% to 2.0% active silicone per individual usage or dilution.

Certifications:

SILICONE OIL produced in ISO 9001 certified plant. **SILICONE OIL** has been certified HALAL by the Department of Islamic Development Malaysia in accordance to MS 1500: 2004 since February 2007. This product has also been certified KOSHER PAREVE NON PASSOVER by KASHRUT London Beth Din in accordance to Jewish Dietary Laws (Torah) since April 2008. In addition, this product also complies with the Official Monographs of DIMETHICONE as laid down by the United States Pharmacopeia-National Formulary.

**Product Name:****SILICONE OIL – FOOD GRADE.****Product Statement:**

SILICONE OIL - Food Grade are pure polydimethylsiloxane silicone fluids with food grade approvals over a wide range of viscosities.

Benefits:

The most important features and benefits of this fluid include:

- Excellent de-foaming activity in non-aqueous media at very low concentration
- Prevents the adhesion of food or grease, protects against corrosion on food equipment.
- Safe on plastics and rubbers
- Prevents building ups of sugars and food.
- Allowing fast and easy cleaning up.
- Little changes in physical properties over a wide temperature range.
- Does not contain genetically modified organisms or materials of animal origin.

Application:

SILICONE OIL-FOOD GRADE is used as:

- Antifoam agents in lipophilic systems for the processing of vegetable oil (such as deep-frying oil), meat and poultry (such as fat rendering)
- Direct food additives in jams, soups, drinks.
- Surface treatment, anti-rust film, release or lubrication agents in the manufacture of food-packaging materials and adhesives, in bottling and canning facilities where incidental contact with food may occur
- Base materials in the production of food-grade antifoam compounds or emulsions
- Processing additives in other applications where a food-grade product is required.

Dosage:

The dosage levels of **SILICONE OIL – FOOD GRADE** are 0.1% to 2.0% active silicone per individual usage or dilution.

Certifications:

SILICONE OIL – FOOD GRADE produced in ISO 9001 certified plant. **SILICONE OIL – FOOD GRADE** has been certified HALAL by the Department of Islamic Development Malaysia in accordance to MS 1500: 2004 since February 2007. This product has also been certified KOSHER PAREVE NON PASSOVER by KASHRUT London Beth Din in accordance to Jewish Dietary Laws (Torah) since April 2008. In addition, this product also complies with the Official Monographs of DIMETHICONE as laid down by the United States Pharmacopeia-National Formulary.



Product Name: SILICONE ANTIFOAM 30 P.

Product Statement:

SILICONE ANTIFOAM 30 P is a specially developed nonionic emulsion containing 30% of a methyl terminated POLYDIMETHYLSILOXANE (1000 centistokes) compounded with silicon dioxide. It is advantageous in certain non-aqueous pharmaceutical manufacturing and most non aqueous food processing applications.

Benefits:

- Chemically inert and non-toxic.
- Good dispersion in aqueous systems.
- Good performance for broad pH ranges.
- Stable at high temperatures.
- Good storage stability.

Application:

This functional ingredient is:-

- Provides foam control for Over-The-Counter (OTC) anti-flatulent medication.
- Provides foam control in various food categories such as soy / tofu, soups, flavors, spices, fruits, vegetables, fermentation, beverages (alcoholic and non-alcoholic, dry drink mix and instant ready-to-drink), meat, poultry, seafood, brine, non-standardized cheese products, sugars / jams / syrups, dairy and dairy products, animal feed and dressings.

Dosage:

The dosage levels of SILICONE ANTIFOAM 30 P are 1.0% to 2.0% active silicone per individual usage or dilution.

Certifications:

SILICONE ANTIFOAM 30P is produced in ISO 9001 certified plant. **SILICONE ANTIFOAM 30 P** has been certified HALAL by the Department of Islamic Development Malaysia in accordance to MS 1500: 2004 since February 2007. This product has also been certified KOSHER PAREVE NON PASSOVER by KASHRUT London Beth Din in accordance to Jewish Dietary Laws (Torah) since April 2008. In addition, this product also complies with the Official Monographs of SIMETHICONE emulsion as laid down by the United States Pharmacopeia-National Formulary.