

DUOPRIME[®] OILS

Date 09/09

- DESCRIPTION:** Duoprime Oils are produced using severe hydrogenation of paraffinic feedstocks utilizing a unique two stage catalytic hydrotreating process. Our DUOTREAT hydrogenation process saturates all aromatic and olefinic compounds while effectively eliminating nitrogen and sulfur containing compounds. The finished products are water white mineral oils of the highest purity. Stabilized with Vitamin E. They are available in a wide range of viscosity grades.
- QUALITIES:** Duoprime Oils exceed requirements set forth in the U.S. FDA regulations 21 CFR 172.878 for use in or on food for human consumption, and 21 CFR 178.3620 (a) for use as a component of nonfood articles intended for use in contact with food for human consumption.
- Duoprime Oils meet the current standards of the National Formulary (NF) or US Pharmacopeia (USP), and are registered as 3H and H1 lubricants for direct and incidental food contact by NSF, for use in food plants under the jurisdiction of the USDA.
- Duoprime Oils are certified as Kosher (passover) with the Union of Orthodox Jewish Congregations of America ©.
- APPLICATIONS:** Duoprime Oils can be used in cosmetics & pharmaceuticals, suntan lotions, baby oils, bath oils, as a base for ointments, as a pelletizing aid, and as a drug processing agent.
- They can be used in the fibers, plastics and resins area as a process aid, a diluent, a pigment dispersant, and textile fiber lubricant. In the food processing area, they can be used as a release agent on grills, bakery pans and dough dividers, cutters, knives, meat packers benches, boards, trays, hooks and other food processing equipment.
- They can be used for coatings for fruits and vegetables, defoamer, shell egg spray, a lubricant and rust preventative for food processing machinery.

SCHUMANN / STEIER, INC.

TYPICAL PROPERTIES:

DUOPRIME® OILS

	70	90	100	200	300	350	500
VIS Grade							
Material Code	42006	42008	42030	42010	42013	42015	42017
Gravity, ASTM D 287, °API	34.0	33.7	33.0	31.7	31.0	30.7	30.1
Specific Gravity at 25°C, ASTM D 1298	0.850	0.854	0.855	0.862	0.866	0.867	0.870
Flash Point COC, ASTM D 92, °F (°C)	70 (188)	385 (196)	385 (196)	415 (213)	440 (227)	450 (232)	490 (254)
Pour Point, ASTM D 97, °F (°C)	-10 (-23)	+10 (-12)	+10 (-12)	+10 (-12)	+10 (-12)	+10 (-12)	+10 (-12)
Viscosity, ASTM D 445, cSt at 40°C	13.9	16.0	20.0	38.8	58.0	67.5	105.5
cSt at 100°C	3.0	3.4	4.2	6.2	7.2	8.7	12.0
ASTM D 2161, SUS at 100°F	73	86	105	200	300	350	560
SUS at 210°F	36.0	38.0	42.0	46.4	52.4	55.0	67.0
Color, Saybolt, ASTM D 156	+30	+30	+30	+30	+30	+30	+30
NF/USP	NF	NF	NF	USP	USP	USP	USP
Kosher	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ	Ⓢ
NSF	3H, H1	3H, H1	3H, H1	3H, H1	3H, H1	3H, H1	3H, H1
FDA, 21 CFR							
172.878	✓	✓	✓	✓	✓	✓	✓
178.3620 (a)	✓	✓	✓	✓	✓	✓	✓
USDA Shell Egg Oil	✓	✓	-	-	-	-	-

Note: All oils above are colorless (Saybolt +30 Color), odorless and tasteless and surpass requirements of FDA and U.S. Pharmacopeia (USP) and National Formulary (NF) standard for Neutrality, Sulfur Compounds, Solid Paraffins, Readily Carbonizable Substances and limit of Polynuclear Compounds (UV test) and Residual Solvents.

Other viscosity grades available, consult your sales manager.