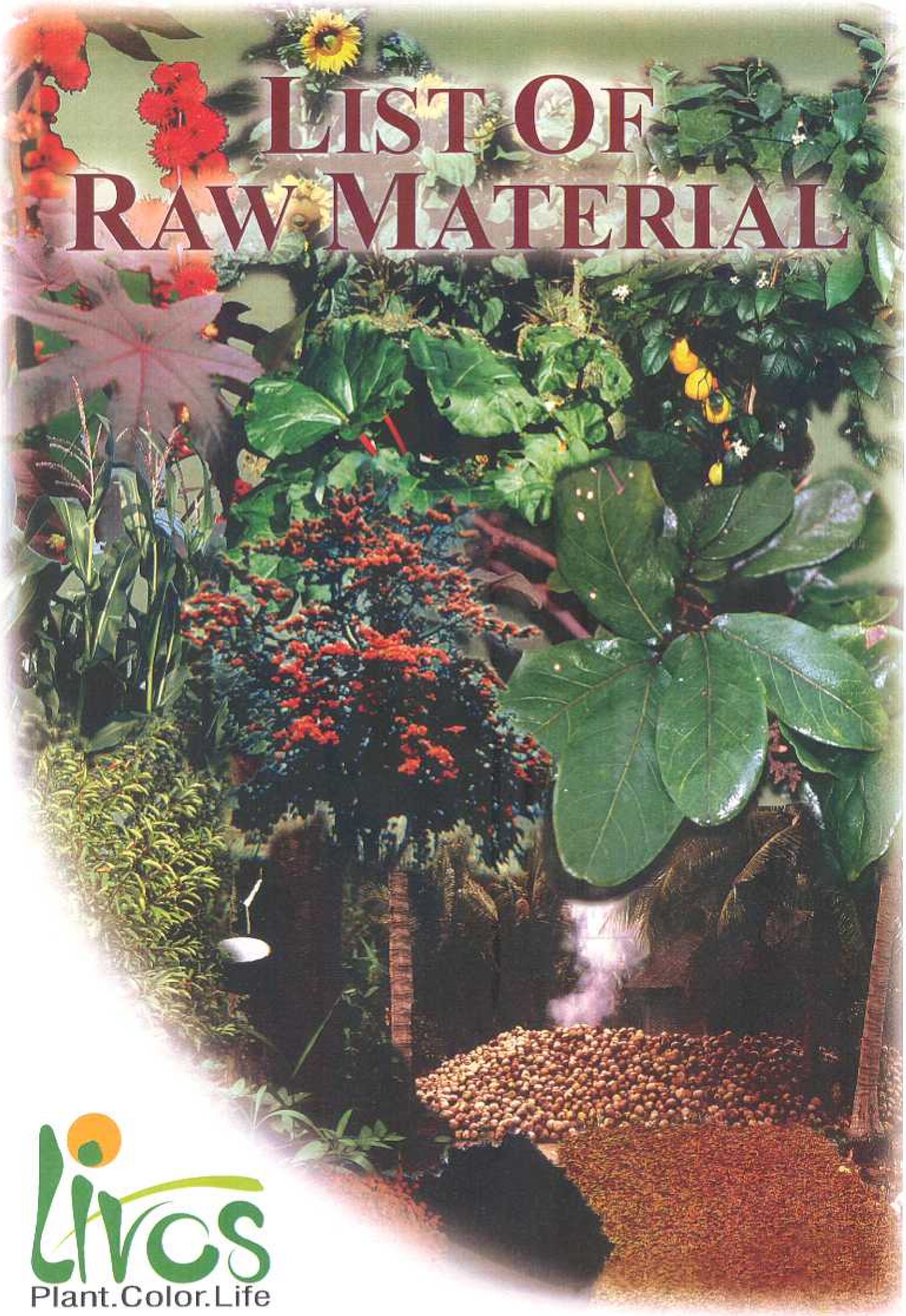
LIST OF RAW MATERIAL



Plant.Color.Life

A

Acetic acid, clear, colorless liquid with a stinging smell, used to adjust the pH. As a concentrate strongly corrosive.

Alkanet, dye plant growing in Southern Europe, also called ox tongue. The color is depending on processing, yielding a red brown color.

Alum, white crystalline powder, used in plant textile dye stuff, or for tanning leather as a mordant.

Alumina, white powder of the mineral bauxite (aluminum oxide). It is used to manufacture wall lasures.

Arven oil, a clear liquid oil of the Swiss Zirbel pine, with a strong, but pleasant scent. It protects against moth and other insects.

B

Beeswax, harvested in the Lüneburg Heath and France. A soft, elastic, water vapor permeable ingredient in LIVOS waxes.

Beeswax soap, aqueous solution of beeswax boiled with lye.

Bentonite, naturally found clay mineral, used as gelling agent and filler in lacquers, printing ink, waxes, putty, adhesives, but also in cosmetic products.

Benzalconium chloride, used pharmacologically i.e. in eye drops as a preservative, effective against many micro-organisms responsible for fast decay in water solutions.

Benzoin resin, Javanese frankincense, a resin smelling of vanilla. Used as a binding agent in wall- and artists' paints.

Bergamot oil, pleasant smelling yellow oil, made from the fruit peelings of the Bergamot oil tree. The oil is used as a fragrance in cleaners.

Birch leaves, used to dye textiles. The yellow color can change to olive green with use of a mordant.

Borax, natural salt, is used primarily as a wood preservative. The environmental compatibility is given by the deposit of the salt in the wood. No outgassing.

Boric acid, natural acid found in well water. The application range is similar to that of borax.

Buckthorn bark, is used in plant dye stuff when red- to velvet brown colortones are desired. Buckthorn (genus Rhamus) is native to Europe, North/East Asia and North Africa.

C

Candelilla wax, light yellow to brown in color, wax made from the spurge shrub, released by boiling the branches. Used in filling putty for furniture building and in combination with other waxes for impregnation.

Carnauba wax, derived of the dried leaves of the fan palm, e.g. from Northern Brazil. This wax is, because of its special hardness, complementing the mechanical stress-ability of all soft waxes.

Calciumhydroxide, is a component used in tile adhesives.

Casein, milk protein, separated by lactic fermentation. Casein is used in adhesives and dispersion wall paints.

Castor oil, made from the colorful seeds of the Christ palm tree, looks pale yellow, adds high UV resistance and good adhesive properties. Softens and yellows little.

Castor stand oil, a highly viscous, dehydrated castor oil.

Cellulose, made of native beech wood and is available as a fiber in differing lengths. Prevents cracking of plaster and adhesive.

Clay, white and colored clay from North German and Dutch clay pits is dried and ground for use in paints and plaster.

Clove oil, is made of different parts of the spice clove tree and is native to Indonesia. It is used as an insect repellent or in dental medicine.

Colza oil, is similar to rape seed oil, looks light yellow to brown yellow. It is won from ground seeds and used in leather fat products and insect repellents.

Catechu, extracted from the heartwood of the Javanese acacia, belonging to the mimosa plant family. Catechu is used as a stain for brown textile dye stuff and together with other mordants to dye leather.

Cedar wood oil, is an essential oil, derived from various cedar woods. This oil is used to aromatize many soaps and cleaners, as well as being a part of insect repellents.

Cellulose, see methyl cellulose.

Chalk, calcium carbonate mined in France, used as a filler for dispersion paints and joining compounds.

Chitosan, a nitrogen containing polysaccharides, made from the shells of crustaceans. Is used as a binder in cork- and textile paints.

Chlorophyll, coloring agent derived from green leaves. The crystallized dark green platelets are used to dye textiles and leather.

Citric acid, natural acid of citrus fruits, used in cleaners for pH adjustment. Made by fermation of sugar solutions.

Citron oil, an essential oil made from the fruits of the citrus media tree. Used as a fragrance.

Cochineal, color made of the Nopal louse, feeding on cacti in Central- and South America and the Canary Islands. The red to violet and gray coloring raw material is also used in the food industry.

Coconut oil, a lard like, white to pale yellow oil, used to make soaps, salves and massage oils.

Corn germ oil, a by-product of manufacturing corn starch, is used for soaps and leather care products.

D

Dammar, light yellow, transparent resin of the South East Asian Dammar tree (Shorea). Being used in dispersion paints and adhesives. It has an outstandingly low degree of yellowing and a high elasticity.

Dimatoteous earth, mature fossilized diatoms (dried algae) are pulverized and used as a filler and suspending agent.

Dolomite, white crystalline mineral with a high grade whitening capacity. Mined from depots in Hammerfall (Switzerland). Is used, because of high mechanical solidity, in joint compounds and wood stains.

Drying agents, are soluble metal soaps, for instance cobalt and circonium octoate, they reduce drying times in linseed oil containing lacquers and paints. The concentration used is minute.

Dyers chamomile, yields a clear yellow to golden yellow dye for wool.

Dyers broom, a bush of medium height native in England, Middle and Southern Europe. The flowers, leaves and thin twigs are used in plant dye. The yellow color is suitable for all natural textiles.

Dyers mulberry tree, is employed if golden yellow to brown plantdye is desired. Made of the heartwood.

E

Ethanol, fermented ethyl alcohol, a liquid solvent, used in dilutants and to thin shellac products.

Eucalyptus oil, is the essential oil of many different kinds of Eucalyptus, prepared primarily in Australia. The oil is used in insect repellents.

F

Flax fibers, textile fiber belonging to the raffia family, made of the 1 meter high, blue blooming linen plant. Are added to reinforce plaster.

G

Gall oak apples, hollow growth on plants, produced by oak insects or fungi. They contain tannins used in dyes.

Glycerin (glycerol), natural component of vegetable and plant fat, e.g. found in olive oil and coconut fats. Won by saponifying. Glycerin serves as a moisturizer .

Golden rod, dried twigs, leaves and yellow flowers of the 1 meter high Solidago plant, yields yellow to yellow-brown plant dye, used in plant dye stuff.

Guar gum, derived from the guar bean, grown in the South of the USA or Pakistan. Works as a thickener in paints, plaster and adhesives similar to methyl cellulose.

Gum arabicum, also called acacia rubber, is dried muscillious plant juice of various acacia species. The rubber is without odor, colorless to brown, forms dissolved in water, a tough, sticky liquid and is used as an adhesive and thickener.

H

Hemp oil, made from THC low seeds of cannabis sativa. Serves as a softener in paints, as a binding agent, adds UV stability and is used as skin protection in cosmetics.

Hydrosulfite, sodium dithionite employed in the vat dye method.

I

Indigo, won by fermentation extraction from fresh plants of Indigofera tinctoria. Alkaline reduced vat dye yields different hues of blue.

Iron chloride, a chemical reagent, used as an oxidation agent and color mordant in textile- and printing dye.

Iron oxide pigments, naturally derived or artificially produced iron pigments in colortones yellow, red, brown and black. Synthetic pigments are used preferably because of their excellent chemical purity, as well as the high human tolerance. The natural, also known as earth pigments, vary highly in quality and often contain parts of unwanted heavy metals.

Iron sulphate, as a mineral found in green or white crusty deposits near Goslar (Germany). Can be technically manufactured by dissolving iron in sulfuric acid. This raw material is used in plantdye and tanning.

Isoaliphates, are solvents necessary for maximal workable consistency. Isoaliphates show only a very low acute toxidity and are free of carcinogenic or mutagenic effects. Because of these properties and good human tolerance they are also used in pharmaceuticals and cosmetics.

J

Japan wax, a white or yellowish plant fat, derived by boiling the Sumac bush. Protects surfaces from drying out, hence used as an impregnating agent and in artists' waxes.

Jojoba oil, non drying, liquid wax from the seeds of the jojoba plant. Native to the Sonora Desert in North America and serves as a high grade fatting agent.

Juniper berry oil, made of ripe, dried berries, the thin colorless oil is used in horse care products

K

Kaolin, a clay mineral mined above the ground in Great Britain. Very white Kaolins are used as fillers in paints and lacquers.

Kermes, substitute Cochineal, coloring made of dried, female Mediterranean Ilex-wood lice, used in natural plantdye.

Kesu blossoms, are processed to be used for orange colored nuances in textile dyes and wall lasures.

Krapp or Turkish red, used in textile dyes and wall lasures. The root of this plant will yield red to brown color nuances. It grows in Germany, Middle Europe and Turkey.

L

Larch tree oil, an essential oil from the larch tree, won by milking the trees. It is colorless, smells like terpenes and is used as a fragrance softener.

Larch tree resin, also called Venetian turpentine, provides resilience, luminescence and a silky sheen to lacquers.

Laurel oil, an essential oil made from the leaves of the laurel tree. It is effectively used in the LIVOS horse care system.

Lavender oil, steam distilled from fresh genuine lavender blossoms, serves for fragrance composition.

Lemon balm oil, an essential oil made of the leaves of the Melissa officinalis plant which comes from the Orient. It is used in cosmetics and as a fragrance.

Lemon oil, the light yellow oil won from the peels of citrus medica subspec smells pleasantly of lemons and consists to 90 % of limes.

Linseed oil, thick golden yellow oil, cold pressed from linseed grown in the Lüneburg Heath under supervised conditions. Primary ingredient of many oils and lacquers, it is an elastic drying oil and binding agent.

Linseed oil - stand oil, made by heating linseed oil, heightens the temperature tolerance and weather resistance and reduces water distention in oils and lacquers.

Linseed - wood oil - stand oil, produced by heating the oils. Wood oil from the walnut-like seeds of the tung oil tree and linseed oil cold pressed in the LIVOS factory, grown under controlled conditions on the Lüneburg Heath.

Linseed oil-stand oil-natural resin ester, is made by heating linseed stand oil up to approximately 260° C and adding natural resins. Used as a binder for lasures, lacquers and oil paints.

Logwood heartwood of a plantation grown tree, i.e. in Mexico, is used to dye natural textiles and leather. The color shades vary from blue to violet and black.

M

Marble meal, calcium carbonate, is used in "hard" products like tile adhesives and roll-on plaster.

Methyl cellulose, water soluble thickener of wood and shaving fibers for paints and glues.

Mica, is composed of various minerals and salts of silicic acid, the flakes shine from light to dark. Iron mica is used as UV protection.

Micro wax, a mix of natural waxes micronized, like beeswax and carnauba wax , exposed to the physical process of micronizing.

N

Natural asphalt, mineral substance mined in Utah and Colorado/USA employed in lacquers and lasures.

Natural latex, natural rubber latex milk from Malaysia, Indonesia or Sri Lanka. This raw material is elastic, water repellent and permeable by air.

Natural resin, tree, brush and plant secretions. The dried, hard, transparent or yellow to brown sap is used in stains, printing inks, pharmaceuticals and as a binding agent.

Natural resin ester, is derived of melted French pine resins that are transformed with natural glycerol. The so treated resins are especially hard and water resistant.

O

Oak bark, dried bark of young tree logs, branches, twigs from the summer oak, as well as the stone or winter oak. Finding use in tanning and plant dye stuff.

Olive oil, non-drying oil pressed out of the pulp of olives. Comes mostly from Italy and is employed in food grade quality. Used in the textile industry for high grade soaps or as a fatting agent for leather.

Orange oil, cold pressed form the fruit peel and cleaned by careful vacuum distillation. Only food grade quality is used.

P

Pine oil, made in the USA from different kinds of pines. Is used as a fragrance, but also to aid levelling and as a wetting agent.

Potassium oleat, potassium salt of oleic acid, made from olive oil. The soap-like mass is used as an emulsifyer.

Potato starch, binder made from locally grown potatoes. For powdery products like distemper paints.

R

Reetha extract, soap nuts, purchased from ecologically responsible collections in India, are processed at the LIVOS factory and made into cleaning products. They are used in India traditionally for hair washing, dental care and cleaning of precious jewelry.

Reseda, dyeplant also known as weld. The whole plant is employed to dye textiles and leather, it yields yellow to olive-brown color tones.

Rhubarb root, is high on tannin glycosides and used to enhance leather.

Rosemary oil, the essential oil made from blossoms and needles of Rosemary bushes. It is greenish-yellow and has a herbaceous, camphor like fragrance, changing strongly depending upon country of origin (Spain, Marroco, USA). It is used as a fragrance in different products.

S

Safflower oil, made from the "dyer's thistle" growing in Europe, India, Iran and North Africa. It is a light colored oil that does not yellow and is therefore used in white lacquers and impregnating oils.

Shellac, a resin secreted by the Asian shellac louse. It is used in lacquers, varnishes and polishes.

Shellac wax, solid result of fermenting raw shellac with alcohol. Because of its hardness it is used in floor polishes and leather care products.

Silicic acid, water containing form of silicium dioxide is found as sand or quartz. Is supplementing lasures and lacquers as a flattening agent.

Silver chloride, is found in nature as horn silver and serves as a high grade, anorganic preservative. Made technically of silver solutions with chloride.

Soda lye, solution of sodium hydroxide in water, used in soap manufacturing with natural fats.

Sodium aluminum silicate, very white platelet-like crystals, found as Zeolite numerously in nature. They are used as fillers in paints.

Soy lecithin, is a part of the soy bean and serves as a wetting agent for lacquers.

Soy-linseed oil-stand oil, is made by heating soy oil and linseed oil and is used in lacquers, oil paints and printing inks.

Soy oil, yellowish to brown yellow, partially drying oil made from ground and pressed soy beans, is used as a binder for lacquers and oil paints.

Sugar fatty acid condensate, an extremely well biologically degradable basic cleaning agent. Is made industrially by a reaction of glucose and coconut oil.

Sunflower oil, a light yellow greasy oil extracted from sunflowers seeds. Because of the high content of unsaturated linoleic acid it is used in lacquers, paints and soaps.

T

Talcum, white mineral powder used as a filler or suspending agent, that improves adhesion of dispersion paints. Mined in Austria, Italy, Canada and Australia.

Titan dioxide, a white pigment with the highest lightening- and covering capacity. It is used in paints and lacquers, but also in cosmetics.

Thyme oil, an essential oil made of different Thyme plants, strongly varying fragrances are possible. It is used as an insect repellent.

Tocopheryl acetate, part of many plants e.g. soy, wheat, corn. Serves physically as Vitamin E, is technically used as an antioxidant to lengthen the shelf life of products.

Turkish red oil, the progenitor of synthetic detergent raw material. Is made of Brazilian castor oil and used as an emulsifier and wetting agent in various products.

U

Ultramarine blue, an anorganic pigment with a crystal structure similar to Lapislazuli. It is used as a mineral pigment in all blue lasures and lacquers.

W

Walnut oil, a light yellow, pleasant smelling oil pressed from the walnut kernels. It is used in impregnating oils and lacquers.

Walnut shells, yield a brown colortone for textile dye stuff. Walnut plantation cultivation is possible in all countries.

Wintergreen oil, essential oil, extracted by steam distillation from the leaves of the evergreen plant indigenous in North America and Canada. Insect repellent.

Wismutvanadat, provides a yellow pigment and is a resource used in pharma- and steel industry.

Wood oil, light yellow oil from the shredded seed shells of spurge plants from South America. Provides faster drying and a good water resistance of paint coats.

Wood oil-stand oil, made by heating linseed oil, heightens the temperature tolerance and weather resistance and reduces water distention in oils and lacquers

X

Xanthan gum, a polysaccharide suitable as thickener and stabilizer for emulsions in paints and cosmetics.

Z

Zinc carbonate, is found in nature as Smithsonite, mainly in Namibia and Zambia. Serves as a white pigment in the paint and textile industry.

Zinc phosphate, the first chrome free anorganic rust prevention pigments. Used in paints, metal treatment and dental medicine.

Zinc oxide, white loose powder, of medium covering ability, used as a pigment in paints, lacquers and plaster.

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