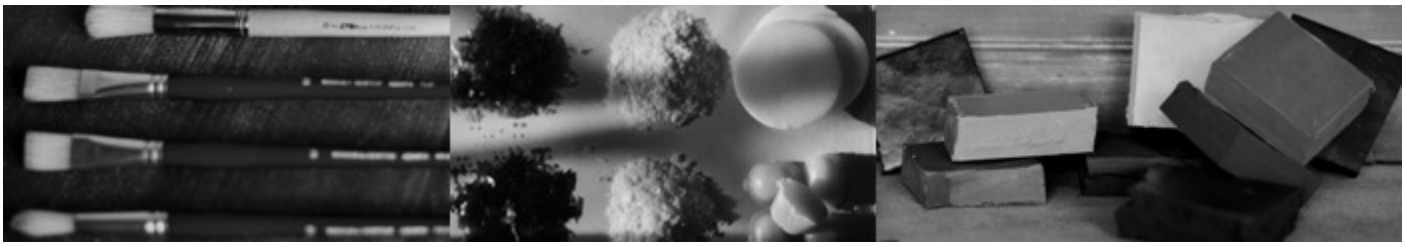
Kama Pigments
Matériel d'artiste

Solvents for oil paintings.

Febuary 2003

PRODUCT ADDITIONNAL INFORMATION SHEET



Presentation.

Kama Pigments is proud to propose a new line of solvents for oil painting, encaustics, wood finishing and other "oil techniques". Everybody knows that oil painting is one of the most ancient and permanent technique there is; however today we see a lot of artists turning away from it for "toxicity reasons". But really, what is so toxic about oils ? Oil paint is simply a mixture of two things: a pigment (which is the same for any painting technique)[1] and linseed oil which is a vegetable oil, both natural and edible ! ?

In fact, if so many are moving away from oils today it is mainly because the traditional solvents are raising major health concerns for the artists who use them, thus the oil painting technique is abandoned. In this new line, we are proposing 3 new solvents. Of gradual intensity, they allow choosing both the appropriate strength and toxicity level of the solvent the artist chooses to use.

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1. A toxic pigment is just as nocive if it is used in acrylics than in any other types of paints. Also note that a pigment's toxicity is limited to skin contact once mixed in paints because it is contained in the binder of that specific paint.

First solvent: Izosol®.

Odourless, non toxic mineral spirit

Izosol is a highly refined mineral spirit made from purified petroleum extracts. It can be used as a cleaner or general-purpose solvent for commercial and artist's oil paints.

Izosol is made from the most refined and the least reactive type of petroleum extract available on the market today. The thorough refining process allows to practically eliminate all of the **aromatic**[2] compounds and/or chlorated hydrocarbons normally found in theses type of solvents: The aromatic content of Izosol in below 0,01% compared to 30-35% for conventional mineral spirits.

Izosol is also a better alternative to other «odourless» solvents because a standard mineral spirit like what can be found in hardware stores contains on average from 30 to 35% of aromatic compounds which creates the characteristic annoying smell found in this type of solvent. The cleaning/refining process that removes nocive aromatic compounds from these solvents reduces the smell. However, this smell disappears well before all of the toxic compounds have been eliminated. So an odourless solvent can contain as much as 10% of toxic aromatic or chlorated compounds. But it's not the case with Izosol because it is refined to the maximum : and only contains 0,01 % of nocive aromatics, **see the specs below**.

Quick facts :

- Practically no long term toxicity, aromatic content under 0,01 %.
- A perfect replacement for conventional mineral spirits or other «odourless» solvents.
- Does not dissolve natural resins (mastic, dammar, mastic ...)

Suggested uses :

- Solvent for oil based paints and techniques.
- Solvent for light cleaning of painting tools (brushes spatulas).

Comparison between Izosol and standard mineral spirits:

	Izosol	typical mineral spirit
Aromatic content (weight %)[A]	<0.01	31
Sulphur content (PPM)[B]	<5	<20
Benzene content (PPM)	<10	N/A
Bromine content (mg bromine/100g)	5	600
Flash point (°C)[C]	59	144

Source: Manufacturers Technical data sheets. Theses numbers represent typical values and do not constitute, in any case, specification limits for these products.

A. Calculated in weight expressed in percentage.

B. **P**arts **P**er **M**illions C. The **Flash point** of a liquid is the minimal temperature at which it emits enough vapours to form a combustible mix with air near the surface of the liquid or in the container used for the tests.

Second solvent: Orange spirit®.

General-purpose solvent for oil based paints of medium toxicity.

Our Orange spirit is a more potent solvent than Izosol because it contains aromatic compounds while Izosol contains none.
Although Izosol can be suitable as a painting solvent, in some cases, notably when painting in oils with mediums containing natural resins (mastic, dammar, copal...) an artist could need a more robust solvent like it is the case with Orange spirit.
Orange spirit is made from the same purified mineral spirit as Izosol but we also add aromatic citrus extracts to improve its solvency power. The aromatic molecules contained in these extracts are very much like those found in turpentine when it comes to solvency power, but much less toxic because they come from natural orange oil.

Quick facts :

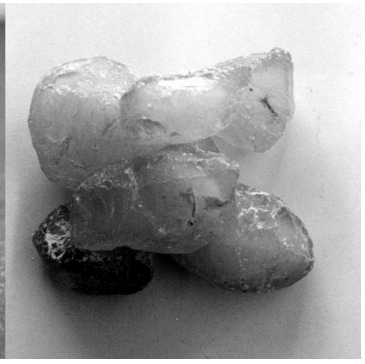
- Low to medium toxicity
- Can replace turpentine in a painting context.
- **Does not dissolve natural resins (mastic, dammar,...)**[3]
- **Note:** It is possible that **painting mediums** or **vanishes** where **turpentine** has been replaced by **Orange spirit** are separating after a while. This reaction is absolutely normal; remixing the contents will resolve the problem.

Suggested uses :

- Solvent for oil based paints
- Thinner for oil painting mediums and varnishes.
- Medium strength cleaner for painting tools (paintbrushes, spatulas).

Our new solvent family

Our products are available at:



Use **Izosol** to make your cold wax mediums for encaustic or wood finishing without the smell associated with turpentine.

Orangine can dissolve all of the natural resins normally prepared with turpentine. Make traditional painting mediums and varnishes easily.

Third solvent: Orangine®.

Powerful solvent for the preparation of traditional natural resin based mediums and varnishes.

Orangine is our strongest solvent. Made solely form citrus extracts it yields superior solvency power over Izosol or Orange spirit. This solvent is even more powerful than turpentine, meaning it can dissolve natural resins and generally faster than traditional turpentine.
If Orangine is so powerful, it's because the citrus oil we use contains a larger proportion of aromatic compounds than our other solvents therefore it is also our most nocive. However, we believe than Orangine is less damageable in the long term than turpentine. In turpentine that is extracted from pine trees we find a lot of **components that can cause allergies**[4] which are not present in the citrus extracts we use.

Quick facts :

- Medium toxicity
- Our most powerful solvent; dissolves damar overnight and even dried paints.
- Can completely replace turpentine.
- Dissolves natural resins (mastic, dammar, soft copals...)

Suggested uses :

- Making dammar and other natural sources varnishes
- Home manufacture of traditional painting mediums and varnishes
- High strength cleaner for painting tools. Ex: paintbrushes and spatulas with partly dried paint

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2. Aromatic *adjective and noun masculine Chemical. Compound containing at least one molecule with a benzoic core. Ex: Aromatic hydrocarbons (c) Larousse.* Aromatic compounds are responsible for both the efficiency and toxicity of a solvent

3. *In fact, Orange spirit can dissolve natural resins but very slowly. We recommend you to use Orangine for that purpose.*

4. *Large parts of the acute effects (itching, redness…) felt when using turpentine are due to allergic reactions. The longer a person uses turpentine, the more the symptoms are likely to manifest themselves. However, some people will not develop these allergies even when using turpentine over a long time, such is the nature of allergies cause by natural compounds.*