

Oxypinene Vapor may be inhaled mixed with the air of a room or directly from the generator by means of a suitable mask. For the treatment of superficial lesions on the surface of the body, it is used by allowing it to flow directly upon the affected surface.

When inhaled oxypinene acts as a stimulating expectorant. When applied to the skin it acts as an antiseptic stimulant.

#### SUMMARIZING.

Oxypinene is an ozonide of pinene, a chemical compound consisting of one or two molecules of ozone ( $O_3$ ) linked to one molecule of pinene ( $C_{10}H_{16}$ ) the active and chief constituent of oil of turpentine.

It is produced in two forms, a vapor and a pale yellow liquid of honey-like consistency.

On contact with moisture it breaks down into hydrogen peroxide, oxides, aldehydes, and ketones or pinene.

Exposed to high temperature auto-oxidation takes place.

It is useful in treatment of tubercular affections, wounds, ulcers, diseases of the mucous membranes, eczemas, hemorrhoids, etc.

It is an expectorant, stimulant and oxidizing agent.

Mixed with diatomaceous earth, one part to two parts, it makes a suitable powder for dressing ulcers, old wounds, etc.

Made into suppositories with stearate from cocoanut oil, about one percent strength, it is very useful in treating diseases of the membranes when a stimulating, mild antiseptic is required.

In a compound ointment combining astringent and drying properties with its antiseptic and stimulating effect, it is useful in eczemas and in certain cases of hemorrhoids.

The vapor may be inhaled from a generator or indirectly mixed with air.

The liquid may be applied to wounds in its strongest form.

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### THE QUALITY OF COMMERCIAL SUGAR OF MILK.\*

J. W. ENGLAND.

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Practically, all the sugar of milk sold in this country is of home manufacture and it compares most favorably with that imported from abroad. Our past experience indicates that the following specifications, in buying sugar of milk, will ensure a product of good quality:

"Sugar of Milk of acceptable quality must be a fine, white, dry, odorless powder of not less than 99.7 percent strength by polariscope containing not more than 0.020 percent of total nitrogen; not more than 0.020 percent fat and yielding not more than 0.050 percent ash. It must comply with the U. S. P. heavy metals test and be neutral to litmus paper. A ten percent aqueous solution must be clear, odorless, colorless and free from mechanical impurities."

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\* Read at meeting of Pennsylvania Pharmaceutical Association, June, 1915.

Recent analyses of seventeen lots of 150 barrels of 200 pounds each, representing about 500,000 pounds, gave the following data:

No.	Ash	Nitrogen	Fat	
1	0.042	0.018	0.0084	(American)
2	0.024	0.013	0.0096	"
3	0.02	0.01	0.025	"
4	0.0209	0.0061	0.017	"
5	0.006	0.0064	0.0213	"
6	0.066	.....	0.0026	(Foreign)
7	0.011	0.0055	0.014	(American)
8	0.010	0.0058	0.008	"
9	0.014	0.006	0.0052	"
10	0.01	0.006	0.0064	"
11	0.01	0.0083	0.0016	"
12	0.01	0.0083	0.002	"
13	0.01	0.0037	0.0168	"
14	0.022	0.03	0.0155	(Foreign)
X	0.23	0.0102	0.0722	Poor appearance, rejected
15	0.020	0.017	.....	
16	0.04	0.0065	0.0045	(Foreign)
17	0.02	0.0069	0.0059	(American)

The percentage of absolute sugar of milk, as determined by the polariscope, was not less than 99.73 percent in any of the samples.

The most striking result of the analyses is the low content of ash. The U. S. P. (IX) standard for ash has been fixed at 0.25 percent; the largest percentages found was 0.066 and 0.04, foreign brands.

ANALYTICAL LABORATORY OF SMITH, KLINE AND FRENCH CO.

## INVERSION OF CANE SUGAR IN SYRUPUS.\*

JOSEPH L. MAYER.

In the February, 1902, issue of the *Druggists' Circular* (page 27), in an article, "Fallacious Tests for Glucose in Cane Sugar Syrup," I showed that Syrupus made according to the official formula by the hot process did not contain more than a very faint trace of reducing Sugar, but after being stored for five months in a corked bottle which had been placed in a cool, dark place, yielded a very heavy precipitate of Cuprous Oxide when tested with Fehling's Solution, indicating that much of the Cane Sugar had been inverted.

The tests made at that time being qualitative only the thought occurred to me recently to make a series of quantitative tests to determine exactly how much of the Cane Sugar was converted into Reducing Sugar, and the following work was therefore undertaken.

On January 28th, 1915, 1000 cc. of syrupus were made following the directions on page 435 of the U. S. P., VIII, for the cold percolation process and the same day 1000 cc. of syrupus were made by the method on page 435 of the U. S. P., VIII, for the hot process, each sample being placed in a sterilized glass stoppered bottle.

The syrup made by percolation had a specific gravity of 1.3148 at 25 deg. C.,

\* Read before the New York State Pharmaceutical Association, June 29, 1915.