How Should Artificial Silk Be Washed?
By Dr. L. Kirberger

Much uncertainty prevails about the washing of artificial silk and enormous damage has been done by its not having been properly handled in the wash.

Ignorance in this connection is, however, not confined to the consumer, but the converter, the wholesaler, and even the manufacturer know much too little of the subject.
In the first place we will deal with those articles of clothing of artificial silk which must be washed owing to the way they are used.

The chief lines are probably knitted goods, Jersey cloth, warp loom and Milanese tricots, which are mainly employed for women's lingerie, underwear, and also for outer garments. For the most part they are made entirely of artificial silk, but also in admixture with wool or cotton.

Stockings and socks of artificial silk will hardly be found in the trade, tops, tocs, ands heels being for the most part made of cotton or mercerized cotton. But what about woven under and outer garments? These too are very rarely made of artificial silk alone, but are generally woven in admixture with cotton, wool, or real silk. Fabrics composed of artificial silk with cotton or real silk are to be found on the market in the shape of men's shirts, drawers, pyjamas, lingerie, women's outer garments, and blouses.

The treatment of artificial silk in the wash is governed by its physical properties. Everybody knows that cotton and linen fabrics can be treated pretty roughly in the wash, and they can be boiled, bleached, treated with hard soap on the washing board or in the washing machine, without suffering any serious injury.

It is quite a different matter with articles of clothing made of wool or even silk: they cannot be treated in this way.

No one would think of washing articles of crêpe de chine on the washing board or with a strong hard soap, because every housewife knows the properties of such fabrics and is well aware that silk or woollen articles must be treated very tenderly in the wash. It is a step in the right direction when she takes similar precautions with articles of artificial silk.

Artificial silk, when dry, has a certain strength which is sufficient for all practical purposes, but it loses part of this strength when it becomes wet. Therefore articles of artificial silk must not be strongly wrung out, pulled, or rubbed.

It is smoother than any other fibre and consequently dirt does not cling to it very readily and penetrates only with difficulty into the thread.

Everyone who has worn artificial silk tricot underwear, especially of pure artificial silk, will himself have observed and praised this pleasant, unique property of artificial silk.

All types of artificial silk, with the exception of acetate silk, swell strongly, and thus tend to loosen any mechanical impurities attached to the fibre, so that they are removed without much mechanical treatment. For this reason, no fibre gets rid of dirt so easily when washed as does artificial silk.

When washed, it must not lose a fraction of its strength, nor its lustre or pliability. It is sensitive to the action of caustic alkanis, such as ammonia, caustic soda, and alkali, and also soda and sodium silicate, and can be made harsh and dull by the use of solutions of soap which contain considerable quantities of soda. It is quite possible to wash artificial silk properly with washing agents which contain slight quantities of bleaching agents, such as perborate, hydrogen peroxide, or hypochlorite, without injuring it.

The consumer, who is not acquainted with this state of affairs, will often complain about the washability of articles of artificial silk because the colour has run or has bled into other articles, and believes that the artificial silk is to blame.

Fully 85 per cent. of all artificial silk fabrics are dyed with loose colours, e.g. women's lingerie and stockings, single shade outer garments and blouses almost always, less often men's underwear and printed upper garments.

Goods of this nature should be washed at a temperature which the hand can just bear, i.e. at from 30—35° C (85—95° F).

Solid soap should not be used at all for artificial silk and it is advisable to employ one or other of the washing agents on the market, such as soap flakes or powder, and prepare soap solutions for washing artificial silk. Such washing agents must be cheap and have high cleansing power, and must be readily removed from the washed articles by rinsing.

A short analysis of the commonest washing agents on the market is given below together with a few remarks upon their suitability for washing artificial silk. The composition of Lux, Perflor, and Persil is as follows:

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<tbody>
<tr>
<td>Lux</td>
<td>pure soap flakes</td>
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<tr>
<td>Perflor 85% soap</td>
<td>15% sodium perborate</td>
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<td>Persil 42.5% soap</td>
<td>16.4% soda</td>
<td>9.2 %sodium perborate</td>
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<td>3 % sodium silicate</td>
<td>28.9% water.</td>
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There can be no doubt that Lux is the least injurious, but the other two also cannot injure
artificial silk in the concentrations in which they are practically used at a temperature of from 30—35° Centigrade.

As is well known, the consumption of artificial silk is many times that of real silk. The whole trade takes an enormous interest in artificial silk and everybody who has to do with the fibre wants to explain about it, although his expert knowledge may be of the slightest. There have accordingly been presented to the public a number of instructions for washing artificial silk which were not always serviceable. For this reason several slight mistakes which have crept into these instructions are here corrected.

A well known manufacturer of washing agents recommends washing artificial silk in cold water.

That may be all very well when an artificial silk tricot which has been dyed with a loose colour is to be washed with a bleaching washing agent. If the fabric were only half artificial silk and dyed fast, it might even be boiled for a short time with a neutral solution of soap without suffering. Such a fabric would be difficult to wash clean in cold water.

The advice is often given to treat artificial silk after the soap solution has been rinsed out with a little vinegar to freshen up the colour. Artificial silk which had been dyed with dyestuffs used for dyeing cotton would thereby be stained and the fabric itself would be given a scroop, which is by no means always desirable.

It is just as unnecessary to wrap artificial silk, after rinsing it, in a cloth to squeeze it out; that can be done without the cloth.

Artificial silk stands ironing well and it should be ironed as if it were real silk. Acetate silk is here too an exception and a fabric of this fibre must not be ironed too hot, which tends to injure it.

It is advisable to steep the artificial silk for about fifteen minutes in the washing liquor because, as already mentioned, part of the dirt is loosened of its own accord by reason of the peculiar physical property of the fibre.

Finally the following directions for washing artificial silk may be proposed here, which are briefly stated, but are intended to be of general application and also for fabrics which contain other fibres than artificial silk.

“Dissolve the washing agent (in the shape of flakes or powder) in water. Lay the articles in the solution for a short time and then wash them out at a low temperature. Strong wringing, pulling, or rubbing must be avoided. Immediately after having been washed rinse until the water is clear, and dry. The fabric stands ironing well. (Do not iron articles of acetate silk too hot.)

Articles of artificial silk and cotton that have been dyed fast can be washed warm with a washing liquor free from bleaching agents.”

If due attention is paid to the foregoing points, it is practically impossible that modern artificial silk should give rise to the least complaint about poor washability.

Every type of artificial silk can nowadays be washed, but it is only natural that certain special brands which show particular strength when dry and when wet have better washing qualities than ordinary viscose. But sufficient practical experiences have been gained which confirm that the latter also, whether woven or knitted, stands washing well.