

Instructions

Art-Nr. 5980 Dry-film lubricant

1. This is a universal lubricant for metal and plastics, commonly also called oil, that can be employed for many different purposes besides its use on model trains.
2. The product can be seen in figure 1. These instructions are part of the product, please retain them well.
3. Why is this product called dry-film lubricant? It is often also referred to as oil, but different from common oil, the dry-film lubricant dries very well in approx. 3 days, only leaving behind a slightly moist surface. It produces a high-quality and well adhering Teflon™film, whose gliding properties far exceed those of the common oils. Due to the high rotation speeds predominant in the model train sector, watery materials or oils often simply get flung away. As a result, there is no more lubricating film, the drive parts run dry and wear out fast. An economical use of the lubricant prevents the models from getting smudged with oil. The Teflon™film produced by the lubricant provides for a durable and dependable lubrication.
4. The fact that the material dries, only leaving behind a slightly moist surface, is a great advantage for model train users and makers, since it does not happen anymore that dirt sticks to the oiled parts as it did before. The dry-film lubricant can be used on all kinds of surfaces.
5. When using it for the first time on a certain spot, it is best to repeat the application 3-4 times. The reason is that the lubricant contains Teflon™, but is not purely made out of Teflon™. Applying it for the first time in a thin layer usually does not provide a sufficient amount of Teflon™ for a durable and thick enough coating of all friction surfaces. When repeating the procedure several times, a firm lubricating film will build up bit by bit. Do not worry, the Teflon™ contained is very thin. The thickness of the film we are talking about is in the nanometer range. It will not happen that things like the bearing bushes or similar get clogged. Besides, this Teflon™film can always be removed with any kind of conventional detergent, see point 6. If the gliding properties decrease and your models do not run smoothly anymore, repeat the application of the dry-film lubricant. This applies all the more in case of very strong or permanent load.
6. Of course you just can apply the lubricant on a soiled or dirty drive part. The lubricant will always have some kind of effect. But surely it works best on clean, dry and grease-free surfaces, so it does not replace a thorough cleaning of the models and particularly the drive parts. You can clean your models before and after the application of dry film lubricant with any kind of conventional detergent.

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figure 1: The dry film lubricant in a 25ml bottle



figure 2: Before using the lubricant for the first time, pierce the thin spout with a needle

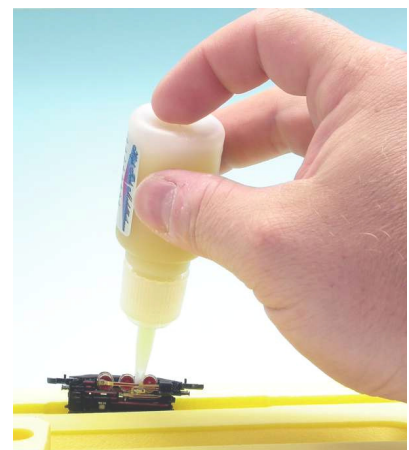


figure 3: Hold the bottle between your thumb and middle finger, dose the lubricant with your forefinger.

Please observe the safety precautions:

- **This is a chemical product and does not belong into the hands of children.**
- **Avoid contact with the eyes, do not ingest or swallow.**
- **When working with this lubricant, do not eat, drink, or smoke. Having finished with your work, always clean your work place and tools, and wash your hands.**
- **Do not let the product get into the sewage.**
- **Do not dispose any leftovers or empty bottles into domestic waste, but take it to a hazardous waste site that accepts lubricating oils.**
- **Always close the bottles well, since the product is very thin fluid and therefore very likely to leak.**

7. The product comes in a 25 ml bottle, closed with a safety cap and a thin spout which has to be pierced with a needle from above before using the lubricant for the first time, figure 2. Do not cut off the top like it is usually done with glue bottles, because then the cap will not be closing properly anymore. The content of 25 ml lasts for a very long time, so compared to similar products, this dry-film lubricant is quite a bargain.
8. Since the bottle is very sturdy, it might happen quite often, that when turning the bottle upside down, the lubricant does not come straight out of the bottle. The best way to get the lubricant out well-dosed is to hold the bottle between your thumb and middle finger and to exert pressure on the bottom of the bottle with your forefinger, figure 3.
9. Experience has also proven that it is very important also to use the lubricant on the two engine mountings with their screws and cogwheels. A small amount of the lubricant put on the side of the cogwheels or screws is enough, but it is important to treat these spots regularly. Almost all of the engine failures we are repairing have emerged from a dry running of the engine mountings. Especially the new 5-pole-engines are affected by this. We suspect that the bearing bushes used in them are very sensitive to abrasion and dry running and therefore need a regular and wear-resistant lubrication. Maybe another reason for this new sensitivity is also, that when mounting the locomotives in Göppingen before delivering them, they do not oil them that much anymore. We can remember the times very well when you took the locomotive out of its box and it left behind quite an oil puddle. Fortunately, these times have passed, but still the two engine mountings are very sensible parts – please always remember this.
10. The lubricant is nearly odourless and can be used for an almost unlimited period of time. Always remember to shake it well before use. Before doing this, do not forget to close the white cap well. A sedimentation of the contents after not having used the lubricant over a longer period of time is normal, they can easily be mixed again by shaking the bottle before use. After shaking it, the lubricant should be cloudy and of a yellow-brown color.
11. If by accident you have lubricated a model too much, you can blow it out with compressed air and then simply wipe away the excess lubricant with a non-fuzzing cloth.
12. If some of the lubricant gets onto any wheels or the tracks, wipe it away. Do not just let the trains keep on running, because then the lubricant would get onto the wheels of other locomotives which would oil wheels and tracks very well for quite some time – something you do not really want on your wheels and tracks. According to our experience, traction tires are not corroded by the lubricant.
13. Another good property of the lubricant is that it helps with contact problems of all kind. It is not conductive, so it does not produce any creeping currents, but it prevents oxidations on all the contact sheets. It has proven to be very useful on current collectors that abut on the axles where the current is transmitted mechanically. This applies especially for wagons with back- or interior lighting. With only a small amount of lubricant on all spots where current is transferred by mechanical friction, you can provide for a current collection much more constant than it normally is.
14. The lubricant can be used at a temperature range between –20 up to +80 degrees Celsius (-4 degrees Fahrenheit up to +176 degrees Fahrenheit).
15. We cannot guarantee that stains on clothing or other material can be removed completely. For cleaning tools, clothing, and hands, use common detergents, washing powders, and soap.

Enjoy working with our dry film lubricant!

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figure 2: Before using the lubricant for the first time, pierce the thin spout with a needle.

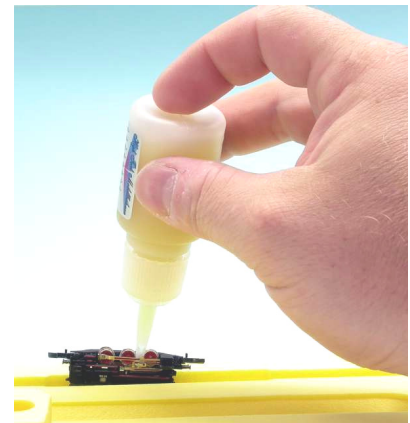


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