

Beware of the risk of burns from using microwave hair removal wax!



Despite a warning issued in 2017 and the corrective measures taken, there have been new reports of burns after using hair removal wax that can be heated in the microwave. These cases are most often due to a failure to follow the instructions. To avoid these accidents, ANSES reiterates that it is essential to follow the instructions concerning heating and resting times and, in the event of a burn, to seek the advice of a healthcare professional. ANSES also invites consumers and healthcare professionals to report these burns to the national cosmetovigilance scheme.

Hair removal has been a way of life for decades, for legs, arms, armpits, «bikini lines» and other parts of the body. A technique commonly used at home is hot wax hair removal. It involves pulling out the entire hair including the root using wax that has been heated before being applied to the skin. The instructions for use generally call for the product to be heated in a microwave oven, but this creates a risk of burns if the user fails to comply with the preparation conditions.

In 2017, due to an increased number of reports of serious second- and third-degree burns caused by poor preparation and handling of tubs of «Nair Cire Divine Monoï des Îles» heated wax, the French Health Products Safety Agency (ANSM), which was then responsible for monitoring adverse effects of cosmetic products, contacted the manufacturer and asked for corrective measures to be taken. This company amended the wording on the packaging to mention the risk of burns, and changed the product formulation to reduce the risk of a crust forming on the surface of the liquid wax, as this promotes splashing when the spatula is inserted into the tub.

The ANSM had issued a warning to consumers in 2018¹. The manufacturer's amendment to the instructions and the reformulation of all its wax products took effect in 2019. As a result of these measures, the annual number of cases of burns due to these products fell, while not disappearing completely (see Figure 1). Since 2020, 21 new cases of burns linked to the preparation of hot wax have been reported (to the ANSM until December 2023, then to ANSES following the transfer of the national cosmetovigilance scheme on 1 January 2024, as well as to poison control centres).

A RECENT CASE

In 2024, ANSES was notified of the case of a young woman with burns to her thumb, neck and part of her thighs. After heating the wax in the microwave, the tub had become soft, and when she took it out, the pressure of her hands on the tub caused the wax to spatter over her body. This resulted in a second-degree burn that required medical monitoring for more than three weeks.

¹ <https://ansm.sante.fr/informations-de-securite/nair-cire-divine-rappel-des-precautions-demploi-a-lattention-des-utilisateurs-information-de-securite#:~:text=Nair%20cire%20divine%20%2D%20Rappel%20des%20pr%C3%A9cautions%20d'emploi%20%C3%A0%20l,des%20utilisateurs%20%2D%20Information%20de%20s%C3%A9curit%C3%A9&text=En%20accord%20avec%20l'Ansm,pr%C3%A9venir%20le%20risque%20de%20br%C3%BBlure>

The packaging stated that the product's appearance should be checked before it was taken out of the microwave. In the event of overheating (very liquid wax, deformed tub, presence of smoke), it was recommended to wait 25 minutes before removing the tub from the microwave.

This report prompted ANSES to analyse the circumstances surrounding the 21 cases of burns reported since 2020 and to warn users of the risk of burns associated with this hair removal technique.

Figure 1 : Évolution annuelle des cas de brûlures à la cire dépilatoire chauffée au micro-onde recueillis dans le cadre du dispositif de cosmétovigilance



BURNS CAUSED BY HANDLING ERRORS

In 43% of the reported cases (n=9), the users did not follow the precautions specified in the instructions for use. This included:

- heating time exceeded (n=1/9);
- failure to comply with resting times (n=6/9);
- incorrect positioning of the tub in the microwave with respect to the manufacturer's instructions (n=2/9).

The circumstances of the accident were not specified for the remaining 57% of cases (n=12), but the hypothesis of misuse remains strong.

Despite users reporting that they had followed the precautions for use, the circumstances mentioned included perforation of the tub, splashing of hot wax, spillage after letting go of the tub due to it being hot, poor handling, or deformation of the protective lid under the effect of heat.

HOW CAN THESE BURNS BE PREVENTED?

Hair removal wax intended to be heated in a microwave oven requires particular care to be taken. Users are recommended to read the labels and leaflets carefully and to follow the manufacturer's instructions for each type of wax.

When manufacturers suggest using microwaves, they provide detailed instructions: indication of the microwave power and the recommended heating time, details of the position of the tub in the microwave (in the centre of the turntable for some, in an offset position for others), indication of the resting time before taking the tub of wax out of the microwave, precautions when inserting the spatula into the wax and when mixing to avoid any wax splashes.

WHAT SHOULD BE DONE IF A PERSON IS BURNED WHILE PREPARING WAX?

Despite all the precautions, if a burn occurs, the French health insurance website ameli.fr recommends:

- running lukewarm water (15-25°C) over the burn for at least 15 minutes or as long as the burn is painful;
- covering the burned area with a clean, dry cotton cloth;
- not applying anything to the burn (e.g. greasy substances, creams, ointments, butter or oil), and not applying ice or ice water, which can damage the skin further;
- consulting a healthcare professional if the skin burn meets the severity criteria, i.e. if blisters appear or if pain persists, in order to receive suitable care.

In addition to treating the burn, the incident should be reported on the Ministry of Health's adverse health event reporting portal <https://signalement.social-sante.gouv.fr/>.

CONCLUSION

The use of hair removal wax that can be heated in the microwave can lead to burns if the preparation instructions are not strictly followed. Accidents continue to be reported, often due to handling errors after heating the wax in the microwave. It is therefore essential that consumers take the time to read the instructions carefully and follow them scrupulously to avoid serious incidents.

Although some cases of burns are due to misuse, they should still be notified via the adverse health events reporting portal. These reports lead to a better understanding of the circumstances of incidents with a view to holding manufacturers accountable. Thanks to this feedback, adjustments to the wording of instructions or precautions for use can be requested, to make them clearer and more visible. This helps to improve product safety and limit accidents.



Elodie Lontsi (ANSES)

FIND OUT MORE

https://vigilances.anses.fr/sites/default/files/VigilAnsesN23_Juillet2024_Cosmetovigilance.pdf