



# White oils as adjuvants in animal vaccines

In creating animal vaccines, you know it's crucial that the adjuvants you use are made with high-quality white oils, which make up as much as 50% of the product.

You need first-rate, low-viscosity oils of medicinal purity so that they don't affect the delicate emulsion stability. We take these needs into account to help us produce our Marcol™ 52 white oil.

Since vaccine adjuvants help the animal respond more quickly to the vaccine and can reduce the amount of the active component required, it is imperative that the adjuvant be made from the purest oil available to ensure optimum efficacy. You can trust Marcol 52 to meet these requirements.

For nearly a century ExxonMobil has produced exceptional white oils and has been a leader with innovative advances. Throughout that long history we have continued to improve our white oils by upgrading our processes and technology to reach outstanding levels of product quality. Along the way we pioneered the use of catalyst manufacturing technology, and we continue to lead the way in white oil manufacturing, storage and handling. We have a comprehensive quality control system in place and reliable supply availability, because we are committed, long term, to the white oils business.

## **Marcol 52 white oil**

Marcol 52 is used as an adjuvant in vaccines for poultry, cattle, chicken, pigs and culture fish.\* Its optimal molecular weight and carbon number range provide superb response. It can be used for emulsions as well as inverse emulsions.

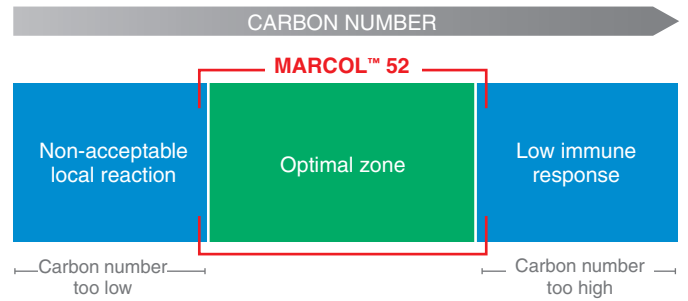
# ExxonMobil

Customers choose Marcol 52™ because:

- It offers a leading technology for adjuvants, with physical and chemical properties that provide optimal efficacy for veterinary applications
- It is manufactured to exceed the purity requirements of the Pharmacopoeias
- It offers a high level of safety, thanks to its high purity (absence of toxic polycyclic aromatics, heavy metals), the complete destruction of germs in the high temperature manufacturing process, and specific packaging and handling procedures
- It is Halal and Kosher certified
- It is produced and controlled according to the ExxonMobil Product Quality Management System, EN ISO 9000 or equivalent standard

Like all of our white oils, Marcol 52 products are manufactured and rigorously tested to ensure compliance with pharmaceutical regulations. You can count on our uncompromising standards of purity, technical excellence and quality when choosing the right white oil for your vaccines.

### Animal vaccines — optimal carbon number range



For more information on how ExxonMobil white oils can provide solutions for you, contact your local representative or visit us at [exxonmobil.com/whiteoils](http://exxonmobil.com/whiteoils).

### Notes

