Conclusions and recommendations

1. KBR3023 has a good safety profile and cosmetic properties. Alone or in typical formulations it does not significantly attack common household materials including plastic coatings and varnishes.

2. KBR3023 was tested under temperate and tropical conditions against important disease vectors Ae. Albopictus, An. gambiae and Cx. quinquefasciatus and several pest mosquito demonstrating excellent repellent properties comparable to, and often superior, to those of the standard DEET.

3. At the manufacturer’s recommended target dose of 0.3 mg a.i./cm² of skin, KBR 3023 confer more than 95 % protection up to 6-7 hours after application. At comparable doses, KBR3023 showed significantly longer protection times than DEET against An. gambiae complex malaria vectors; although further studies are needed to assess its efficacy against a broader range of anopheline vector species, KBR 3023 can be recommended as the repellent of choice for malaria prevention.

4. Given the promising results shown by KBR3023, efficacy test of this chemical for treatment of mosquito nets, garments, and other materials is recommended.

5. KBR3023 is recommended as a safe and effective insect repellent for human use.