COLD FACTS

Dear Reader,

the editorial in ATZ 10/2013 took a closer look at the ongoing debate on the new air conditioning refrigerant. The comments it contained resulted in a lengthy phone call with the press spokeswoman from Honeywell, who expressed her doubts about the Mercedes study on the dangers posed by R1234yf. Our editorial team, on the other hand, saw no cause to question the Mercedes findings or the fundamental assessment and recommendation by the UBA, Germany's main environmental protection agency. Nevertheless, this conversation gave us sufficient reason to carry out more detailed research. We will be presenting the findings of this research in ATZ 3. But as the topic is such a controversial one, there will be a preview of the report in the next issue already here.

One thing is certain: The refrigerant debate is certainly putting the heat on the industry. In spite of the Mercedes report and findings by the UBA, the debate continues to be a fierce one. According to Honeywell, R1234yf fulfils all requirements of OEMs and does not pose any danger to humans or the environment. They refer to the German Federal Office for Motor Traffic (KBA) and the international Society of Automotive Engineers (SAE), who did not classify the reservations as being relevant for evaluation and certified the refrigerant to be "safe in accordance with current regulations". However, this argumentation does not consider the findings of the Federal Institute for Materials Research and Testing (BAM), nor the warning by the professional fire fighters' association (Berufsverband Feuerwehr e. V.) and the opinions of leading chemists.

We believe that "safe in accordance with current regulations" is not a particularly reassuring basis for allowing a refrigerant that is known to be highly inflammable to be used by customers in the long term.

Something that is meant to cool should not burn. The fact that the decomposition products of R1234yf also present a serious health risk does not make things much better either. The situation seems to be a complete mess, as each report is countered by an opposing report. And at the same time, there is an obvious alternative: CO₂ as a refrigerant is non-inflammable, harmless to health and does not decompose into chemical components that pose a danger to organisms and its costs for the customer are not excessive.

The cold, hard fact is that the refrigerant issue is highly complex and highly explosive – both literally and politically. After all, in addition to the risk and environmental discussion surrounding R1234yf, there is also the question of cost, as well as its impact on the image of OEMs. These and other issues will be the focus of our report in ATZ 3 in the coming month. The topic is bound to be an exciting one.

Kind regards,

DR. ALEXANDER HEINTZEL, Editor in Chief
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