

CLARIANT INTERNATIONAL LTD. - 4132 MUTTENZ - SWITZERLAND

BUSINESS UNIT ADDITIVES

To whom it may concern

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Public

Clariant's intellectual property on phosphinate-based flame retardants (Exolit® OP)

Dear valued customer or end user of flame retarded materials,

Clariant, a leading specialty chemicals manufacturer, has developed a flame retardants technology based on the substance class of organic phosphinates which have been commercially marketed under the trademark Exolit® OP since 2004. These phosphinates have become a leading solution for halogen free flame retarded materials, e.g. for engineering thermoplastics like polyamides and polyesters and for epoxy-based adhesives for printed circuit board applications.

Clariant has widely covered this innovative technology by numerous patents and patent applications. Our intellectual property (IP) portfolio still consists of approximately 500 active IP-rights on phosphinate substances, formulations of phosphinates with co-flame retardants (synergists), production processes and the key application areas. It consequently covers the production as well as the sale and commercial use of the protected products.

Whilst Clariant has been the only supplier for many years, some Chinese manufacturers have started offering similar products. Please be aware that sourcing and using such materials may not only infringe Clariant's Chinese patents, but also Clariant's IP rights in other countries, especially for items that are globally marketed. In order to protect our own and our customers' business, we are thoroughly observing the market of flame retardants and flame retarded end products regarding potential infringement issues. Clariant has been taking the matter very seriously and continues to take appropriate legal measures.

If you are an original equipment manufacturer and brand owner, you are well aware of the value and importance of intellectual property. If materials are used in your supply chain which may

violate patents or trademarks this can cause reputational and legal damage. To be on the safe side, we suggest that you may ask your compound and part suppliers to confirm that the flame retardants are purchased from trustworthy sources and adhere to legal standards.

Should you receive any questions or statements from our competitors on IP right claims of Clariant's phosphinate flame retardants in your products, please inform us. We offer to comment and to support you appropriately.

Yours sincerely,



Jochen Ahrens
Head of BL Flame Retardants
BU Additives



Adrian Beard
Head of Market Segments BL Flame Retardants
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科莱恩国际有限公司 - 4132 MUTTENZ - 瑞士

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瑞士穆顿兹/上海, 2022 年 5 月 17 日

关于科莱恩次膦酸盐阻燃剂 (Exolit® OP) 知识产权的声明

尊贵的客户, 尊贵的阻燃材料最终用户:

自 2004 年以来, 领先的特种化学品制造商科莱恩开发了一种基于有机次膦酸盐类物质的阻燃剂技术, 该技术已经以 Exolit® OP 商标进行商业销售。这类次膦酸盐已成为无卤阻燃材料的领先解决方案, 例如用于热塑性工程塑料如聚酰胺和聚酯, 以及用于印刷电路板应用的环氧基粘合剂等。

科莱恩为该项创新技术在全球 (包括中国) 范围内申请和获得了众多专利。我们的知识产权 (IP) 组合还包括相关商标和大约 500 项关于次膦酸盐物质、次膦酸盐与增效阻燃剂 (协效剂) 配方、生产工艺和关键应用领域的有效专利, 涵盖相关产品的生产、销售和商业用途。

尽管科莱恩一直是二烷基次膦酸盐以及以此为基础的阻燃剂材料的唯一供应商, 但一些中国制造商和供应商已经开始提供类似产品。我们提醒您注意, 采购和使用非科莱恩供应的此类材料不仅可能侵犯科莱恩的中国专利, 还可能侵犯科莱恩在其他国家和地区拥有的知识产权, 这对于面向全球市场销售的产品尤为重要。我们正在对阻燃剂和阻燃终端产品市场的潜在侵权问题进行彻查, 以保护科莱恩以及我们客户的业务。科莱恩对此极为重视, 并将适时采取适当的法律措施, 维护科莱恩的合法权益。

如果贵方是原始设备制造商 (OEM) 和品牌持有人, 您必定深知知识产权的价值和重要性。如果在您的供应链中使用可能侵犯专利或商标的材料, 您不但要承担相关法律责任, 还可能会导致企业声誉受损。安全起见, 我们建议贵方要求您的阻燃材料和零部件供应商确认其阻燃剂的采购渠道是否可信, 并符合法律标准。

如果贵方就您产品中科莱恩次膦酸盐阻燃剂知识产权主张收到来自我们竞争对手的问题或声明, 请告知我们。我们愿意为您提供意见和适当的支持。

此致,



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阻燃剂业务总监



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