

# Candidate POPs

Chlorinated paraffins with carbon chain lengths in the range  $C_{14-17}$  and chlorination levels at or exceeding 45 per cent chlorine by weight

**CAS No.** 85535-85-9

**Full Name:** Alkanes,  $C_{14-17}$ , chloro

**Synonyms:** Medium-chain chlorinated paraffins (MCCPs); Chlorinated paraffins,  $C_{14-17}$  (used in Annex VI of the CLP Regulation)

## Uses:

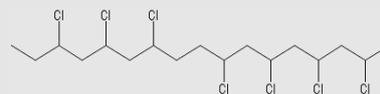
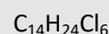
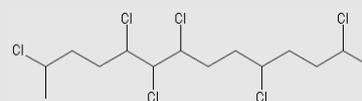
Chlorinated paraffins (CPs) with carbon chain lengths in the range  $C_{14-17}$  and a chlorination level at or exceeding 45% chlorine by weight, are the principal constituents of substances called medium-chain chlorinated paraffins (MCCPs) in Europe, North America and Australia, and major constituents of several products manufactured in Asia. MCCPs have a number of uses such as a secondary plasticizer in polyvinyl chloride (PVC), adhesives, sealants, paints and coatings; a flame retardant in PVC and rubber compounds, adhesives, sealants, paints and coatings, and textiles; an extreme pressure lubricant and anti-adhesive for metal working fluids; a waterproofing agent for paints, coatings and textiles; and a carrier solvent for colour formers in paper manufacture.

## Reference:

1. Proposal to list chlorinated paraffins with carbon chain lengths in the range  $C_{14-17}$  and chlorination levels at or exceeding 45 per cent chlorine by weight in Annexes A, B and/or C to the Stockholm Convention on Persistent Organic Pollutants. UNEP/POPS/POPRC.17/6.
2. Additional information relating to the proposal to list chlorinated paraffins with carbon chain lengths in the range  $C_{14-17}$  and chlorination levels at or exceeding 45 per cent chlorine by weight in Annexes A, B and/or C to the Stockholm Convention on Persistent Organic Pollutants. UNEP/POPS/POPRC.17/INF/5.

## Hazards and Risks to human health and the environment

CPs with carbon chain lengths in the range  $C_{14-17}$  and a chlorination level at or exceeding 45% chlorine by weight, are considered to be persistent and may be long-range transported. The capacity to bioaccumulate has been assessed for CPs with 14 carbon atoms and suggested for CPs with carbon chain length in the range  $C_{15-17}$ . CPs are released to water, air, soil and sewage sludge. Constituents of CPs with  $C_{14-17}$  chain lengths are very toxic to aquatic invertebrates in the environment. Finally, adverse effects observed in rodents offspring such as internal hemorrhaging and death, suggest that CPs may cause potential adverse effects in mammalian wildlife.



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