

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

September 29, 1998

TO: Cobalt neodecanoate file (CAS # 27253-31-2)

FROM: Gary Butterfield, Toxics Unit, Air Quality Division

SUBJECT: Initial Threshold Screening Level (ITSL) for cobalt neodecanoate

A September 16, 1998, Chemical Abstracts Service (CAS) on-line and National Library of Medicine (NLM) literature search was not able to find any information on this compound. A search of the usual secondary references (RTECS, IRIS, IARC, NTP, ACGIH) also did not find any toxicity information.

It is believed that this cobalt carboxylic acid salt will disassociate into cobalt and carboxylic acid quite readily. The cobalt (Co^{++}) is bound to the carboxylic acid (OH^-) ionically. Therefore it is considered to be appropriate to have the screening level based on the cobalt ITSL, and adjust the screening level upward by the ratio of molecular weight of cobalt neodecanoate to cobalt to allow for the increased molecular weight of the carboxylic acid; assuming that the carboxylic acid does not have significant toxicity compared to the metal. Thus the screening level of cobalt which is 0.2 ug/m^3 with an 8 hour averaging time is multiplied by $(401/59)$ to obtain an ITSL for cobalt neodecanoate of 1.4 ug/m^3 with 8 hour averaging.

GB:SLB

cc: Mary Lee Hultin, AQD