

ORIGINAL

TSCA NON-CONFIDENTIAL BUSINESS INFORMATION

DOCUMENT DESCRIPTION	DOCUMENT CONTROL NUMBER	DATE RECEIVED
8EHQ-12- 18828	88120000371	9/18/12

COMMENTS:

DOES NOT CONTAIN CBI

348057

TSCA Confidential Business Information Center (7407M)
EPA East - Room 6428 Attn: Section 8(e)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

September 10, 2012

Re: TSCA Section 8(e) Notification



2012 SEP 18 AM 5:58
RECEIVED
OPPT/CBIC

Dear TSCA Section 8(e) Coordinator:

This notification is being submitted pursuant to Section 8(e) of the Toxic Substances Control Act ("TSCA") by the Cobalt Development Institute (CDI) and the Cobalt REACH Consortium (CoRC) on behalf "the Company Sponsors". The Company Sponsors have commissioned certain toxicity testing for elemental cobalt powder (CASRN 7440-48-4).

Summary of Preliminary Test Results for Elemental Cobalt Powder

OECD TG 425 (Acute Oral Toxicity, Up and Down Procedure, in Rats)

An acute oral toxicity test (Up and Down Procedure) was conducted with rats to determine the potential for Cobalt Powder Ultrafine to produce toxicity from a single dose via the oral route. Under the conditions of this study, the acute oral LD₅₀ of the test substance is estimated to be 550 mg/kg of body weight (the one dose with partial response, with an assumed sigma of 0.5) in female rats with a 95% PL confidence interval of 215.9 mg/kg (lower) to 1140 mg/kg (upper).

OECD TG 436 (Acute Inhalation Toxicity in Rats)

The aim of the present experiment was to obtain information on the acute toxicity and respiratory irritation, following a single 4-hour inhalation exposure of rats to cobalt powder.

Rats were exposed to a dry aerosol of Cobalt at gravimetrically determined concentrations of 0.05±0.00, 0.51±0.02 mg/L air, 1.05±0.02 mg/L air and 5.08±0.07 mg/L air by inhalation using a dynamic nose-only exposure chamber. The aerosol was generated with the aid of a dry, rotating brush dust generator. Mild to moderate tissue inflammation was reported in the nose, trachea, and larynx. Intense tissue inflammation was reported in the lungs. Under the conditions of this study, the 4-hour inhalation LC₅₀ of Cobalt is: <0.05 mg/L (< 50mg/m³) air (males, females, and males and females combined).

Upon issuance of the final study reports for cobalt powder, CDI/CORC will make copies of the study available to the EPA TSCA section 8e coordinator.



CONTAINS NO CBI

Re: Cobalt Development Institute. TSCA Section 8(e) Notification for Elemental Cobalt Powder

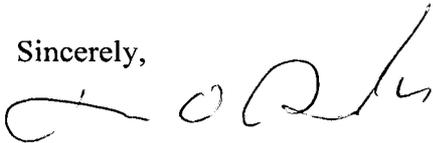
Company Sponsors

Allegheny
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Correspondence related to this 8(e) report filing may be directed to me at :

Occupational and Environmental Medicine
Duke University Medical Center
2200 W Main Street St. 400
Durham, NC 27705
T: (919) 286 5744
Thomas.Brock@duke.edu

Sincerely,

A handwritten signature in black ink, appearing to read 'T. Brock', written in a cursive style.

Thomas O. Brock, PhD DABT
Consulting Toxicologist

cc: Mr. David Weight, Cobalt Development Institute, General Manager

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