

General

Synonyms: salcomin, salcomine, salcomine powder, salicylaldehyde ethylenediimine cobalt, Co(SALEN)₂

Use:

Molecular formula: C₁₆H₁₄CoN₂O₂

CAS No: 14167-18-1

EINECS No: 238-012-5

Physical data

Appearance: black crystalline powder

Melting point:

Boiling point:

Vapour density:

Vapour pressure:

Density (g cm⁻³):

Flash point:

Explosion limits:

Autoignition temperature:

Water solubility:

Stability

Stable. Incompatible with strong acids, strong oxidizing agents.

Toxicology

Skin, eye and respiratory irritant.

Toxicity data

(The meaning of any abbreviations which appear in this section is given [here.](#))

Risk phrases

(The meaning of any risk phrases which appear in this section is given [here.](#))

R36 R37 R38.

Transport information

(The meaning of any UN hazard codes which appear in this section is given [here.](#))

Non-hazardous for air, sea and road freight.

Personal protection

Safety glasses, adequate ventilation.

Safety phrases

(The meaning of any safety phrases which appear in this section is given [here.](#))

S36.

*** CHEMICAL IDENTIFICATION ***

RTECS NUMBER : GG0590000
CHEMICAL NAME : Cobalt, N,N'-ethylenebis(salicylideneiminato)-
CAS REGISTRY NUMBER : 14167-18-1
LAST UPDATED : 199710
DATA ITEMS CITED : 3
MOLECULAR FORMULA : C16-H14-Co-N2-O2
MOLECULAR WEIGHT : 325.25
SYNONYMS/TRADE NAMES :
* Bis(salicylaldehyde)ethylenediimine cobalt(II)
* Cobalt,
((2,2'-(1,2-ethanediylbis(nitrilomethylidyne))bis(phenolato))(2-)-N,N',O
,O')-
* Cobalt, ((alpha,alpha'-(ethylenedinitrilo)di-o-cresolato) (2-))-
* N,N'-Ethylenebis(salicylideneiminato)cobalt (II)
* Salicylaldehyde ethylenediimine cobalt
* Salcomin
* Salcomine
* Salcomine powder

*** HEALTH HAZARD DATA ***

** ACUTE TOXICITY DATA **

TYPE OF TEST : LCLo - Lowest published lethal concentration
ROUTE OF EXPOSURE : Inhalation
SPECIES OBSERVED : Rodent - mouse
DOSE/DURATION : 390 mg/m3/5.5H
TOXIC EFFECTS :

Lungs, Thorax, or Respiration - structural or functional change in trachea

or bronchi

Lungs, Thorax, or Respiration - chronic pulmonary edema

Lungs, Thorax, or Respiration - other changes

REFERENCE :

AMRL** Aerospace Medical Research Laboratory Report. (Aerospace Technical
Div., Air Force Systems Command, Wright-Patterson Air Force Base, OH
45433)

Volume(issue)/page/year: TR-74-78,1974

*** STATUS IN U.S. ***

EPA TSCA Section 8(b) CHEMICAL INVENTORY

EPA TSCA TEST SUBMISSION (TSCATS) DATA BASE, JUNE 1998