

## Certificate of Analysis

**Product Name:** Dithizone  
ACS reagent, for spectrophotometric det. of Cd, Cu, Hg, Pb,  
Zn,  $\geq 98.0$  % TLC

**Product Number:** 43820

**Batch Number:** BCCF0999

**Brand:** Sigma-Aldrich

**CAS Number:** 60-10-6

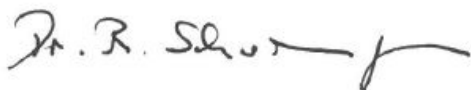
**Formula:**  $C_6H_5NHNHCSN=NC_6H_5$

**Formula Weight:** 256.33

**Quality Release Date:** 13 DEC 2020

**Recommended Retest Date:** OCT 2024

TEST	SPECIFICATION	RESULT
APPEARANCE (COLOR)	BROWN TO VERY DARK BROWN AND PURPLE TO VERY DARK PURPLE	VERY DARK PURPLE
APPEARANCE (FORM)	POWDER	POWDER
PURITY (TLC AREA %)	$\geq 98.0$ %	100.0 %
SOLUBILITY (COLOR)	LIGHT YELLOW TO VERY DARK YELLOW AND LIGHT GREEN TO VERY DARK GREEN	VERY DARK YELLOW
SOLUBILITY (TURBIDITY)	CLEAR	CLEAR
SOLUBILITY (METHOD)	10MG IN 10ML PYRIDINE	10MG IN 10ML PYRIDINE
RESIDUE ON IGNITION	$\leq 0.3$ %	0.3 %
CARBON CONTENT	60.92 % (THEORY)	60.29 %
HYDROGEN CONTENT	4.72 % (THEORY)	4.61 %
NITROGEN CONTENT	21.86 % (THEORY)	21.78 %
INFRARED SPECTRUM	CONFORMS TO STRUCTURE	CONFORMS
TEST BY UV SPECTROSCOPY	RATIO OF ABSORBANCES (620 NM:450NM): $\geq 1.55$	CORRESPONDS
ACS SPECIFICATIONS	CORRESPONDS TO REQUIREMENTS	CORRESPONDS TO ACS (11TH ED.)
REMARKS ON ACS	HEAVY METALS (AS PB) $\leq 0.002$ %	$\leq 0.002$ %



Dr. Reinhold Schwenninger  
Quality Assurance  
Buchs, Switzerland

Sigma-Aldrich warrants that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current specification sheet may be available at Sigma-Aldrich.com. For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.