



SUMMIT RESOURCE GROUP INC  
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### Certificate of Analysis

Customer:	Product Number	: 50450739
	Product Name	: Formic Acid 90% Bulk US
	Vehicle	: 1531
	Batch/Lot	: 5132444790
	Manuf.Date	: 02/21/2012
Attention:	Shipped Date	: 03/13/2012
FAX:	Shipped Quantity	: 43,900.000 LB
Cust Prod:	Delivery Date	: 03/13/2012
Cust Prod Name:	Order Number	: 111484553 000010
Cust P.O.: VERBAL		
Cust P.O. Line: 1	Delivery Note	: 122154643 000010

Characteristic	Result	UOM	---Specification---		Test Method
			Minimum	Maximum	
ASSAY, wt%	90.00	%	89.00	91.00	GC
WATER, WT %	10.00	%	9.00	11.00	KARL FISCHER
COLOR, Pt-Co Units	5			50	SPECTROCOLORIMETRY
NON-VOLATILES, wt%	0.000	%		0.005	ASTM D 1353

Comments:

The following are typical values and test methods:

- \* Description: Formic Acid is a colorless to yellowish liquid, with a pungent odor.
- \* Acetic Acid - <= 500 ppm ISO 731/VII
- \* Sulphate - <= 1 ppm ISO 731/V
- \* Chloride - <= 1 ppm ISO 731/IV
- \* Density @20C g/cm3 1.21
- \* Iron - <= 1 ppm Atomic Spectrometry
- \* Other Heavy Metals - <= 1 ppm Atomic Spectrometry
- \* Aluminum <.01 mg/l
- \* Chromium: <.01 mg/l
- \* Phosphates <.01 mg/l
- \* manufacturing site: Germany

The information contained herein is based either on analytical tests of samples or on statistical process data; it is intended solely for purposes of comparison with the established specifications for the product. Warranties of the product are exclusively as set forth in the applicable contract documents.

THIS CERTIFICATE OF ANALYSIS HAS BEEN PRODUCED ELECTRONICALLY AND IS VALID WITHOUT A SIGNATURE.