

CASE STUDY

CARBON FOOTPRINT REDUCTION – Developing Local $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

How can the Sinoz Group reduce our customers greenhouse gas contributions?

Abstract

Kanins International Pty Ltd (part of the Sinoz Group) is the world’s largest supplier of copper sulphate to the base metal processing sector. With much of the demand coming from Australia and specifically QLD, the Sinoz Group keenly looked for better ways to partner and share technology with those who are seeking to develop ‘local’ options. Through technical support and exclusive distribution agreements Kanins is now proud to offer three local supply options for copper sulphate pentahydrate for end users who want to make a difference.



Introduction

Kanins International Pty Ltd (part of the Sinoz Group) is a company focused on sourcing quality reagents to complement those manufactured by the Sinoz Group. Kanins is the world’s largest supplier of copper sulphate pentahydrate to the base metal processing sector. Kanins also maintains a FAMI-Qs certification through FIAAA and offers feed grade copper sulphate to the animal feed sector.

Not all copper sulphates are created equally. The material can be manufactured from a variety of industries, to a range of qualities and can have significant variability in physical handling qualities. Specialist knowledge is required to match the physical and chemical properties to those required by end users and build a sustainable future.

The majority of copper sulphate is manufactured internationally and is distributed globally via international shipping.

As mines look to do what’s right and decrease carbon emissions, the need for ‘local’ copper sulphate emerges. Kanins partners with ‘local’ start up manufacturers in Queensland to provide Australian miners with ‘local’ supply.

How is the Sinoz Group Helping?

Figure 1 shows the first commercial load from a North Queensland producer supported by Kanins in its re-development of what was once a leading Australian copper sulphate producer.

With over a decade having passed and ownership changes, Kanins committed to support the re-start of the operation and to adding the maximum value to the operation. With ‘technical’ mining grade material currently being produced the team are now working to create ‘feed’ grade products to enhance the sustainability of the operation.

Figure 1: North Queensland ‘Local’ production



Further south, Kanins continues to support another ‘local’ copper sulphate producer, as it works to improve the quality of its material. By providing multi-source logistics options for end users, Kanins have been able to create a sustainable channel to market that both supports the manufacturer and allows the end user to reduce its carbon footprint.

CARBON FOOTPRINT REDUCTION – Developing Local $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$

How can the Sinoz Group reduce our customers greenhouse gas contributions?

As part of our approach to quality, we have worked together with independent Australian analytical laboratories to revive the analytical techniques and expertise required to support a 'local' copper sulphate industry. Through Kanins support, Figure 2 shows that it is now possible for independent laboratories to perform the correct quality tests on copper sulphate products.

Figure 2: Intendent Laboratory test now able to be conducted in Australia.

CERTIFICATE OF ANALYSIS			
Certificate Number	R1441751 [R01]	Page	1/1
Client	Kanins International	Registering Laboratory	Brisbane
Contact	Nicole Watt	Contact	
Address	131/15 Hall Street Port Melbourne VIC 3207	Address	
Telephone	0438 117 759	Email	
Order Number	---	Telephone	
Job Description	Copper Sulphate	Date Samples Received	
Client Job Reference	---	Date Analysis Commenced	
No. of Samples Registered	2 Sampler: Customer	Issue Date	
Priority	Normal	Receipt Temperature (°C)	
		Storage Temperature (°C)	Ambient (25 °C)

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full, if samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Results are reported on as 'as is' basis unless otherwise indicated in the 'Report Comments' section. Measurement Uncertainty is available upon request. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions
 | <: Less Than | >: Greater Than | RP: Result Pending | ~: Estimated | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | * Subcontracted Analysis | NA: Not Applicable | [NT]: Not Tested | LOR: Limit of Reporting | TBA: To Be Advised | NDI: Not Detected | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR | IH: Inconsistent results possibly caused by sample homogeneity

Authorised By

Name	Position	Accreditation Category

Kanins also attends trade shows and conferences to build market awareness and to find customers for which the 'local' products offer benefit.

Figure 3: Kanins stands at international events.



Conclusion

Kanins was and is instrumental in reviving Australian 'local' copper sulphate production. 'Local' producers are now growing, and end users now have access to low carbon footprint copper sulphate.

Importantly, Kanins true innovation is not just in an isolated approach to 'local' production, but rather, working closely to match the physical & chemical characteristic of various copper sulphates

to offer end users, the right goods, at the right time, to remote sites to ensure the flotation process is controlled and well managed. Through Kemtec, the impacts of 'local' material is understood and addition strategies developed.

If you have any questions or if you would like to understand more about Kanins and the Sinoz Group please reach out on the numbers/emails below.

Contacts

Nicole Watt
 General Manager Quality
 131/15 Hall Street, Port Melbourne, VIC 3207
 Australia
 P: +61 3 9646 3833
 M: +61 401 232 486
 F: +61 3 9646 3933
 E: nicole.watt@kanins.com

Sales Europe/Africa
Ivana Stankovic
 M: +381 64 167 33 46
 E: ivana.stankovic@kanins.com

Sales QLD/PNG
Ross Hocking
 M: +61 432 446 088
 E: ross.hocking@kanins.com

Sales Vic/Tas/NSW
Nixon Makwanya
 M: +61 418 455 711
 E: nixon.makwanya@kanins.com

Sales WA/SA/SEA
Timothy Harrington
 M: +61 490 702 443
 E: tim.harrington@kanins.com

Sales Americas
Simone Watt
 M: +61 412 717 953
 E: simone.watt@kanins.com