GHS & PROP-65 CHARACTERIZATION & LABELING

"Scientific Approaches to Hazard Inversion"

Reddwall Solutions offers leading edge product characterization services to document the physicochemical characteristics of each product prior to distribution into a regulated environment. Using internationally recognized techniques, we reverse hazard classification (Hazard Inversion) and generate the Safety Data Sheet (SDS) and Toxicological Risk Assessment language needed to attest to these changes. This suite of analytical tools and exemption verbiage excludes products from regulation:

- **Globally Harmonized System of Classification and Labeling (GHS)**
- **Workplace Hazardous Materials Information System (WHMIS)**
- **OSHA HazCom 2012**
- **CLP - ECHA**
- **REACH**

California Proposition 65

WARNING: Cancer and Reproductive Harm – www.P65Warnings.ca.gov

Reddwall Solutions, LLC
Delivering Systems & Support

GHS LEVEL; XRC(M) ANALYSIS REPORT

Reddwall Solutions, LLC
PO Box 381
Monroeville, PA 15146
Attn: Product Stewardship

Report Date: March 1, 2019
Materials Received: Methyl Ethyl DHINH
RJ Lee Group Job No: THH153218/1903025
Analysis Service: GHS Level - XRC(M)

ANALYSIS: RoHS & Prop-65 Quantitation by GHS-Compliant XRC(M) Analysis Techniques

This reporting is provided as an integral part of EU Directive 2015/863 (RoHS 3) and the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Prop-65) and includes an evaluation of the following RoHS 3 and Prop-65 Elements and Compounds (shown together with their applicable RoHS restriction thresholds):

Metals	Bromate Compounds	Phthalate Compounds
Lead (Pb): < 1000 ppm	*Polybrominated Biphenyls (PBB): < 1000 ppm*	*Bis (2-Ethylhexyl)phthalate (DEHP): < 1000 ppm*
Mercury (Hg): < 100 ppm	*Polybrominated Diphenyl Ethers (PBDE): < 1000 ppm*	*Benzyl butyl phthalate (BBP): < 1000 ppm*
Cadmium (Cd): < 100 ppm		*Dibutyl phthalate (DBP): < 1000 ppm*
Hexavalent Chromium: (Cr VI) < 1000 ppm		*Diisobutyl phthalate (DIBP): < 1000 ppm*

XRC(M) sequential treatment and analysis included microwave digestion and cryo-milling in advance of CVAA, ICP-AES, IC and GC-MS analysis along with standard calibration series protocols. Based on the outcome of these analyses, the amount of each RoHS 3 and Prop-65 Element and/or Compound occurring within the As-Presented material sample we characterized, was below the detection limit established by each method and non-detectable for purposes of RoHS 3 and Prop-65 compliance. Thus, no further reporting is required with details of these results described within the attached laboratory service reports.

In accordance with RoHS and Prop-65 regulation, we recommend that this material may be exempt from classification and labeling due to the absence of those chemicals of interest and hereby offer the following SDS Section 3 language:

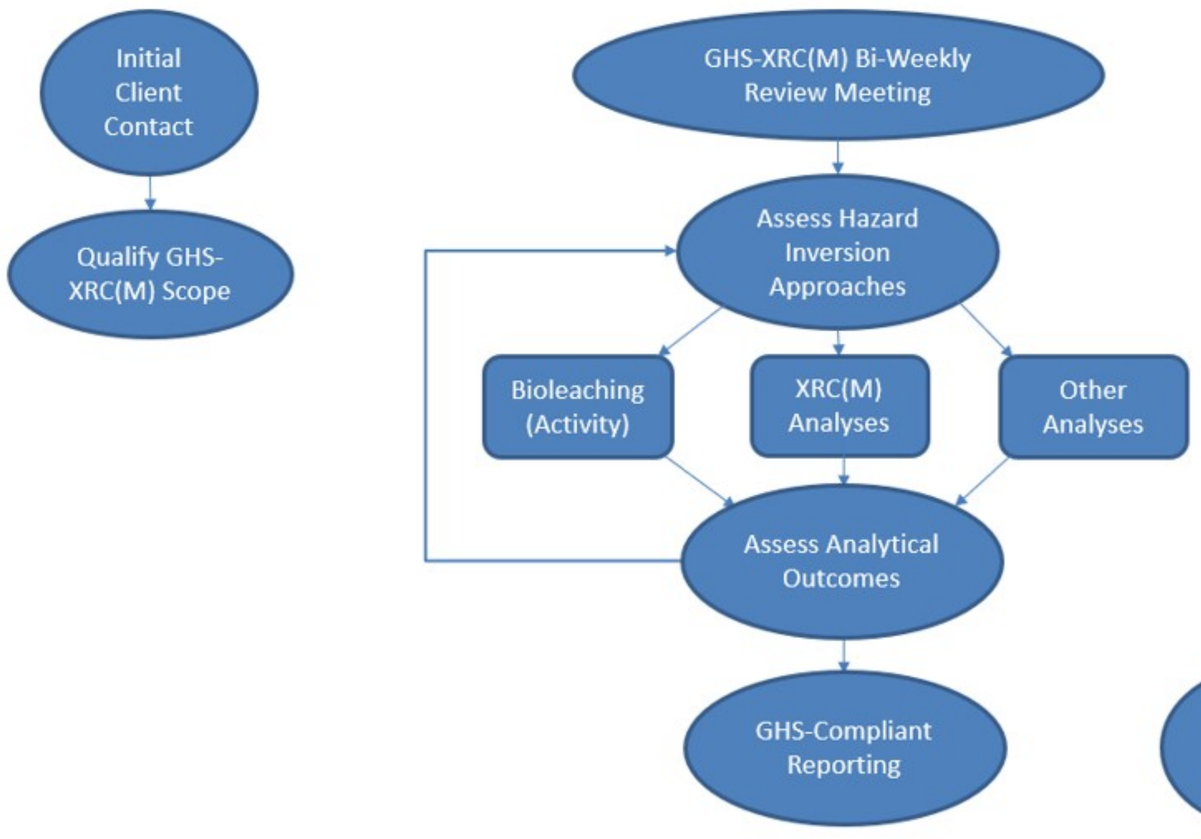
3.2 Hazardous Components
Per XRC(M) analysis, which combines the analytical capabilities of X-Ray Diffraction, Computer Controlled Scanning Electron Microscopy/Energy Dispersive Spectroscopy, Raman Spectroscopy and Inorganic/Organic methods to quantify chemical, physicochemical and/or mineralogical species within the product – any naturally occurring RoHS regulated chemicals of interest existing within this product is inextricably bound, environmentally unavailable and at de minimis concentration. Thus, in its current and anticipated future physical state, the product is incapable of triggering either RoHS 3/Prop-65 classification or toxicologically relevant exposure under either normal conditions of use or in case of extreme upset.

Authorized Signature _____ Date 03/01/19
Donald H. Ewert, Toxicology Services

All analysis services referenced by this report were performed by RJ Lee Group, Inc., a laboratory which operates in accordance with ISO 17025:2005 guidelines and holds a limited scope of accreditations under differing agencies; refer to http://www.rjlg.com/about-us/accreditations/ for more information and status.

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Get the Big Picture



» Decreases cost for development and management of material inventories

» Eliminates Emergency Response and Spill Control Planning

» Materials don't have to treated as hazardous, decreasing costs and easing management

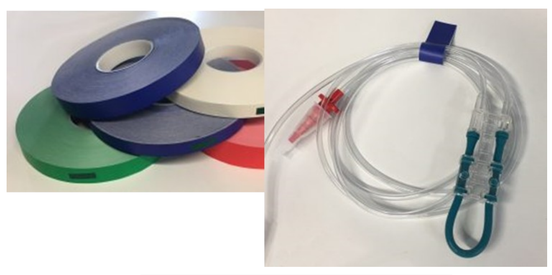
» No engineering controls or worker protection required during handling

» Reduces regulatory reporting since the product is no longer classified as hazardous

» No warning provisions, concerns, or compliance needed for destination countries







GREAT LAKES MINERALS — Conforms to HCS 2012 - United States

SAFETY DATA SHEET
Version 1.0
Revision Date: 05/25/2019

1. IDENTIFICATION
Product identifiers
Product Name: Round Kiln (RD) 88 GRIPgrain Calcined Bauxite
Product Number: RD-88-GRIPgrain
Trade Name: RD-88-GRIPgrain
Chemical Family: Chinese Bauxite - Calcined

Relevant identified Uses
Identified Uses: Industrial Uses and Applications

Supplier Details
Company: Great Lakes Minerals
1200 Port Road
Wurtland, Kentucky 41144-1635
USA
Telephone: +1 (606) 833-8383
Email: CustomerService@glmin.com

Emergency Telephone Number
Emergency Phone#: (606) 833-8383 x233; Office Hours, 8AM-5PM US Central Standard Time

2. HAZARDS IDENTIFICATION
Classification of the substance or mixture
Component Classified – None
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) – Not Classified

GHS Label elements, including precautionary statements
Pictogram: Not applicable
Signal word: No signal word
Hazard statement(s): Not applicable
Precautionary statement(s): Not applicable

Hazards not otherwise classified (HNOC) or not covered by GHS – none

3. COMPOSITION/INFORMATION ON INGREDIENTS
Substance/Mixture: Mixture
Other Means of Identification: Calcined Bauxite
Ingredients

Chemical Name, Empirical Formula	CAS Number	EINECS Number	Percentage (%)
Aluminum Oxide, Al_2O_3	1344-28-1	215-691-6	>80% WT
Aluminum Silicate, $Al_6Si_2O_{13}$	1302-93-8	215-113-2	10% - 15% WT
Titanium Aluminum Oxide, $TiAl_2O_5$	12004-39-6	234-456-9	3% - 5% WT
Titanium Dioxide, TiO_2	13463-67-7	236-675-5	1% - 2%
Varies (Naturally Occurring)	-----	----	<1% WT

* The exact composition of Non-Hazardous Proprietary Ingredients is a trade secret in accordance with paragraph (i) of §1910.1200

RD-88-GRIPgrain Page 1 of 7 Great Lakes Minerals

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