



Saskatchewan Mining and Minerals Inc.

P.O. Box 120
Chaplin, Saskatchewan
Canada, S0H 0V0

Phone: 306-395-2561
1-800-667-9111
Fax: 306-395-2546



ANYHYDROUS SODIUM SULPHATE

**DETERGENT GRADE PRODUCT
INFORMATION SHEET
WITH TRACE CONSTITUENTS**
Meets FCC and Kosher Requirements
Effective: January 1, 2024

Location **Chaplin Plant**
Material Source **Natural Lake Deposit**
Process **Multiple Effect Evaporators**

NOTE: The chemical, screen, physical (non-generic) and nutritional data are average values for the 2023 production and are not to be construed as guarantees. Individual shipments may be subject to normal variation from the typical.

AVERAGE CHEMICAL ANALYSIS:

Sodium Sulphate	*Na ₂ S ₀₄	99.32%
Calcium Sulphate	CaS ₀₄	0.06%
Magnesium Sulphate	MgS ₀₄	0.34%
Sodium Carbonate	Na ₂ C ₀₃	0.00%
Sodium Bicarbonate	NaHC ₀₃	0.04%
Sodium Chloride	NaCl	0.23%
Water Insolubles		0.01%

*Minimum 99.0% by Difference

TYPICAL TRACE CONSTITUENTS:

Moisture		0.022%
Iron	Fe in ppm	2.929

AVERAGE SCREEN ANALYSIS:

U.S. Screen Sieve Size	Percent of Total	Percent Cumulative
+ 20	0.2%	0.2%
- 20 + 40	0.9%	1.1%
- 40 + 60	7.5%	8.6%
- 60 + 100	31.7%	40.3%
- 100 + 200	46.5%	86.8%
- 200	13.2%	100.0%

MATERIAL DATA:

Chemical NameAnhydrous Sodium Sulphate
Chemical FormulaNa₂S₀₄
Molecular Weight..... 142.04
CAS Number7757-82-6

PHYSICAL DATA:

AppearanceWhite Granular Powder
Specific Gravity2.7
Melting Point882°C
pH of Solution6.25 @ 1% by weight
6.80 @ 5% by weight
7.52 @ 10% by weight
Bulk Density88.35 lb/cu.ft Free Flow
Solubility @ 20°C.....15.9% by weight
Reflectance91.2 avg ASTM E 97
Angle of Repose32°

NUTRITION DATA:

Sodium32.25%
Sulphur22.53%
Magnesium0.069%
Calcium0.018%

MISCELLANEOUS:

Packaging50 pound bags and supersacks
Bulk Shipmentsbulk hopper railcars
bulk and pneumatic trucks
RailroadsCanadian Pacific Kansas City Railway
Food ChemicalsMeets FCC Specifications,
Tenth Edition, 2016
KosherCertified as Kosher
ISO 9001:2015.....Certified QMS - Intertek SAI Global

The listed information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make sure their own investigation to determine the suitability of the information for their particular purpose.

Please contact us regarding any questions you may have concerning this information, or regarding any other data not detailed in this publication.

Information concerning the handling and use of this product is provided in the Safety Data Sheet (SDS) available by contacting SASKATCHEWAN MINING AND MINERALS INC. The SDS must be fully read and understood prior to any exposure, handling or use of the product.

TRACE CONSTITUENTS - Chaplin				
ELEMENT	SYMBOL	TEST METHOD	CONCENTRATIONS (ppm or ug/g)	
ALUMINUM	Al	ICP-AES	2.6	TOTAL
ANTIMONY	Sb	ICP-MS	<0.2	TOTAL
ARSENIC	As	ICP- AES	<0.5	TOTAL
BORON	B	ICP-AES	1.4	TOTAL
BROMIDE	Br	ICP-AES	<5	TOTAL
CADMIUM	Cd	ICP-AES	<0.001	INSOLS
CADMIUM	Cd	ICP-AES	0.002	SOLUBLE
CHROMIUM	Cr	ICP-AES	0.050	INSOLS
CHROMIUM	Cr	ICP-AES	0.013	SOLUBLE
COBALT	Co	ICP-AES	0.002	INSOLS
COBALT	Co	ICP-AES	0.002	SOLUBLE
COPPER	Cu	ICP-AES	0.006	INSOLS
COPPER	Cu	ICP-AES	0.006	SOLUBLE
IRON	Fe	ICP-AES	2.86	INSOLS
IRON	Fe	ICP-AES	0.069	SOLUBLE
LEAD	Pb	ICP-AES	0.005	INSOLS
LEAD	Pb	ICP-AES	0.003	SOLUBLE
MANGANESE	Mn	ICP-AES	0.2	TOTAL
MERGURY	Hg	AA	<0.002	TOTAL
NICKEL	Ni	ICP-AES	0.027	INSOLS
NICKEL	Ni	ICP-AES	0.012	SOLUBLE
PHOSPHORUS	P	ICP-AES	<1	TOTAL
PLATINUM	Pt	ICP-AES	<0.2	TOTAL
POTASSIUM	K	ICP-AES	150	
SELENIUM	Se	ICP-AES	<0.5	TOTAL
SILICON	Si	GRAVIMETRIC	<30	INSOLS
TELLERIUM	Te	ICP-MS	<0.5	TOTAL
ZINC	Zn	ICP-AES	0.021	INSOLS
ZINC	Zn	ICP-AES	0.012	SOLUBLE

- AA TEST METHOD- Atomic absorption.
- ICP-AES TEST METHOD - Inductively coupled plasma - atomic emissions spectroscopy.
- ICP-MS TEST METHOD - Inductively coupled plasma - mass spectroscopy
- <0.001 denotes concentrations below the confident detection limits of the test used.
- PPM and UG/G are equivalent measurements.
- The above results were obtained for a single typical sample. Concentrations for individual shipments may vary from the above.