

# CRYOLITE POWDER

## General Inquiries

### North & South America

Tel: 1-800-828-1666

### Europe

Tel: +44(0)161-848-0271

info@washingtomills.com

www.washingtomills.com

## Washington Mills

### North Grafton, Inc.

P.O. Box 428

20 North Main Street

North Grafton, MA 01536

Tel: 508-839-6511

Fax: 508-839-7675

Email: info@washingtomills.com

## Washington Mills

### Electro Minerals Corp.

P.O. Box 423

1801 Buffalo Avenue

Niagara Falls, NY 14302

Tel: 716-278-6600

Fax: 716-278-6650

Email: info@washingtomills.com

## Washington Mills

### Electro Minerals Corp.

P.O. Box 1002

7780 Stanley Avenue

Niagara Falls, Ontario L2E 6V9 Canada

Email: info@washingtomills.com

## Washington Mills

### Tonawanda, Inc.

1000 E. Niagara Street

Tonawanda, NY 14150

Email: info@washingtomills.com

## Washington Mills

### Electro Minerals Ltd.

Mosley Road, Trafford Park

Manchester M17 1NR England

Email: info@washingtomills.com

## Washington Mills Hennepin, Inc.

13230 Prairie Industrial Parkway

Hennepin, IL 61327

Email: info@washingtomills.com

## Washington Mills AS

NO-7300

Orkanger, Norway

Email: wmas@washingtomills.no

## DESCRIPTION

CRYOLITE Powder, also referred to as Sodium Hexafluoroaluminate ( $\text{Na}_3\text{AlF}_6$ ), is a synthetic cryolite, distributed by Washington Mills, which closely approximates the performance of natural Greenland cryolite, particularly when used as an active filler in grinding wheels.

## APPLICATIONS

AUTOMOTIVE – for use in brake pad linings

BONDED ABRASIVES – active filler in resin bonded grinding wheels

ENAMEL & GLASS FRITS – a flux and opacifying agent

ALUMINUM - METALLURGY – component of fluxing agents, protective and refining salts

BLASTING & PYROTECHNICS – for fireworks

PRODUCTION OF WELDING AGENTS – component of welding rod coatings and welding powders

PRODUCTION OF SOLDERING AGENTS – component of fluxing agents

## TYPICAL CHEMICAL ANALYSIS

Na	30 – 32%
Al	12 – 13.5%
F	Min. 53.0%
$\text{Fe}_2\text{O}_3$	Max. 0.03%
$\text{SO}_4$	Max. 0.5%
$\text{SiO}_2$	Max. 0.25%
$\text{P}_2\text{O}_5$	Max. 0.03%
Cl	Max. 0.1%
Pb	Max. 0.0005%
LOH	Max. 2%

## TYPICAL PARTICLE SIZE DISTRIBUTION

50% typically 8-20  $\mu\text{m}$

## SAFETY REMARKS

Consult appropriate MSDS.  
Avoid inhalation

## TYPICAL PHYSICAL PROPERTIES

Appearance	White powder
Density	2.95 $\text{g}/\text{cm}^3$ at 20°C
Bulk Density	600 – 1000 $\text{g} / \text{l}$
Melting Point	1027°C
Solubility in water	0.42 $\text{g} / \text{l}$ at 20°C
pH Value saturated solutions	Approx. 6
Surface Area	Approx. 1 $\text{m}^2 / \text{cm}^3$

This product information is NOT a specification. It is offered in good faith only as a general description of the product. **Washington Mills makes no warranty of merchantability or of fitness for any particular purpose.** The product chemistry and other characteristics may vary or contain trace elements not specifically listed. If your intended application for this product is so critical that relatively minor variations in chemistry or physical properties could cause problems or damage to your process or product, please contact our office for further assistance.