



SAFETY DATA SHEET

ALUPREM - aluminum monohydrate - powder

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name	ALUPREM - aluminum monohydrate - powder
Synonyms, Trade Names	TB, TOR Brite and SR-100 products
REACH Registration number	01-2119555298-28-0014
REACH Registration notes	mono-constituent substance

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses	catalytic application flame retardant filler surface coatings
Uses advised against	Any use other than those identified.

1.3. Details of the supplier of the safety data sheet

Supplier	TP&T BV Burgemeester Moslaan 13 8051 CP Hattem The Netherlands Tel: +31-38-33 88 657 Fax: +31-38-444-62-07 info.tpt@torminerals.com
----------	---

1.4. Emergency telephone number

TP & T BV (Tor Minerals International Inc.): +31-38-33 88 657 / 0031(0)611060679

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Not classified.
	Human health	Not classified.
	Environment	Not classified.

Classification (67/548/EEC) Not classified.
 The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Human health
 Dust may irritate the eyes and the respiratory system.
 Environment
 The product is not expected to be hazardous to the environment.

2.2. Label elements

Label In Accordance With (EC) No. 1272/2008
 No pictogram required.

Precautionary Statements

P261	Avoid breathing dust.
------	-----------------------

ALUPREM - aluminum monohydrate - powder

P280	Wear eye protection.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313	If eye irritation persists: Get medical advice/attention.
P401	Store in accordance with local regulations.
P501	Dispose of contents/container in accordance with local regulations.
Supplementary Precautionary Statements	
P264	Wash contaminated skin thoroughly after handling.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Boehmite			>98%
CAS-No.: 1318-23-6	EC No.: 215-284-3	Registration Number: 01-2119555298-28-0014	
Classification (EC 1272/2008) Not classified.	Classification (67/548/EEC) Not classified.		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration number 01-2119555298-28-0014

REACH Registration notes mono-constituent substance

Composition Comments

No classified ingredients, or those having occupational exposure limits, present above the levels of disclosure.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move to fresh air. Consult a physician if necessary.

Ingestion

Rinse out mouth and give plenty of water to drink. Seek medical advice.

Skin contact

Mechanical (dry) removal. Subsequent rinsing with water.

Eye contact

Check for contact lenses which must be removed from the eyes before rinsing.

Intensive rinsing with water. Consult a physician if necessary.

4.2. Most important symptoms and effects, both acute and delayed

None

4.3. Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

None

ALUPREM - aluminum monohydrate - powder

5.3. Advice for firefighters

None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe dust. Keep unnecessary people at a safe distance.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Avoid generation and spreading of dust. Sweep up and dispose in accordance within the regulations.

6.4. Reference to other sections

see section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling: Avoid dust formation. No special handling advice required.
Advice on protection against fire and explosion: Not explosive. No special measures necessary.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry and cool place.

7.3. Specific end use(s)

For industrial use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

No exposure limits noted for ingredient(s).

Boehmite (CAS: 1318-23-6)

DNEL					
Industry	Inhalation.	Long Term	3.59		mg/m ³
Consumer	Oral	Long Term	Systemic Effects		2.37 mg/kg/day

8.2. Exposure controls

Technical: Avoid dust formation

Engineering measures Provide adequate general and local exhaust ventilation.

Respiratory equipment If ventilation is insufficient, suitable respiratory protection must be provided.

Hand protection

Wear suitable protective gloves conforming to EN 374. Seek recommendations from manufacturer or supplier. After using gloves the hands should be washed and thoroughly dried and a suitable moisturiser applied.

Eye protection

Wear approved safety goggles.

Other Protection

Provide eyewash station and safety shower.

Hygiene measures

Wash promptly if skin becomes contaminated. When using do not eat, drink or smoke.

ALUPREM - aluminum monohydrate - powder

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Powder.
Colour	White.
Odour	Odourless.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	2920 - 3040°C
Melting point (°C)	2040°C with decomposition
Relative density	3.0 @ 20°C
Bulk Density	400 - 450 kg/m ³
pH-Value, Diluted Solution	7 - 9 @ 10% As an aqueous slurry.
Partition Coefficient (N-Octanol/Water)	
Not relevant	

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal conditions. See section 7.

10.3. Possibility of hazardous reactions

Not determined.

Hazardous Polymerisation

Not relevant

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Reacts with strong acids and caustic solutions

10.6. Hazardous decomposition products

Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

REACH dossier information

Acute Toxicity (Dermal LD50)

Scientifically unjustified.

REACH dossier information

ALUPREM - aluminum monohydrate - powder

Acute Toxicity (Inhalation LC50)
> 2.3 mg/l (dust/mist) Rat 4 hours
REACH dossier information

Respiratory or skin sensitisation:

Respiratory sensitisation

Mouse

Not sensitising.

Skin sensitisation

Guinea pig maximization test (GPMT):

REACH dossier information

Not Sensitising.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Chromosome aberration:

Ambiguous

Genotoxicity - In Vivo

Scientifically unjustified.

Ignored due to low Klimisch scoring of the test methodology.

Carcinogenicity:

Carcinogenicity

LOAEL 100 mg/m³ Inhalation. Hamster

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Scientifically unjustified.

Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - repeated exposure:

STOT - Repeated exposure

NOAEL 3225 mg/kg Oral Rat

Target Organs

Central nervous system

Not classified as a specific target organ toxicant after repeated exposure.

Inhalation

High concentrations of dust may irritate throat and respiratory system and cause coughing. Pre-existing respiratory conditions may be aggravated by exposure to dust.

Ingestion

May cause discomfort if swallowed.

Skin contact

Skin irritation is not anticipated when used normally. Not a skin sensitiser.

Eye contact

Can cause mechanical irritation to eyes.

Route of entry

Inhalation.

Target Organs

Respiratory system, lungs

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

ALUPREM - aluminum monohydrate - powder

12.1. Toxicity

Acute Fish Toxicity

Not toxic at limit of water solubility.

Acute Toxicity - Fish

NOEC 60 days 169 µg/l *Salvelinus fontinalis* ((American) brook trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 100 mg/l *Daphnia magna*

Acute Toxicity - Aquatic Plants

EC50 72 hours > 100 mg/l *Scenedesmus subspicatus*

12.2. Persistence and degradability

Not applicable for inorganic substances

12.3. Bioaccumulative potential

Not applicable

12.4. Mobility in soil

Not applicable

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

None

14.6. Special precautions for user

See section 6 and 8.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No hazardous goods.

ALUPREM - aluminum monohydrate - powder

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Statutory Instruments

Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 SI No 716. (CHIP4).

Control of Substances Hazardous to Health Regulations (as amended). (COSHH)

Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007. (CDG 2009)

Management of Health & Safety at Work Regulations 1999.

Approved Code Of Practice

The Control of Substances Hazardous to Health Regulations 2002 (as amended). Approved code of practice and guidance.

Fifth Edition 2005. HSE Books, or download at: <http://www.hse.gov.uk/pubns/priced/I5.pdf>

Guidance Notes

Introduction to Local Exhaust Ventilation HS(G)37.

Dust: General principles of protection (revised) EH44 1997.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

ADR (L'Accord européen relative au transport international des marchandises dangereuses par route.)

National Regulations

The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007).

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Information Sources

REACH Registration Dossier.

Revision Comments

Comprehensive revision.

And translated into the language of this document as of the date below.

Revision Date 03-OCT-13

Revision 04

Supersedes date 02-MAY-13

Risk Phrases In Full

NC Not classified.

Disclaimer

SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

No statements herein are to be construed as inducement to infringe any relevant patent. Under no circumstances shall seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be the Buyer's purchase price. Data and results are based on lab. work and must be confirmed by testing for its intended conditions of use.

All data and recommendations as well as formulations made herein are based on our present state of knowledge. We disclaim all liability on risks or formulae that may result from the use of our products, including improper or illicit use.

TP&T b.v., Burgemeester Moslaan 13, 8051CP, Netherlands, Tel +31 38 3388 657, Fax + 31 38 4446 207, www.torminerals.com