



SAFETY DATA SHEET ALUPREM - aluminum trihydrate

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

1.1. Product identifier

Product Name	ALUPREM® - aluminum trihydrate
Synonyms, Trade Names	All grades of TA, TAB, TAG, TG, TGR, TH, THB, THG, TLV, TS, TWT, XL with and without CES, LV, DES, MES, S, SES, SOC, VS modification
REACH Registration number	01-2119529246-39-XXXX
REACH Registration notes	mono-constituent substance
CAS-No.	21645-51-2
EC No.	244-492-7

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

Identified uses	Pigment Filler for paint and plastics. Flame retardant Smoke suppressant in polymers
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
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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, CLP)

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: Not a health hazard under normal conditions of use and as delivered. High dust concentrations may cause mechanical irritation of the eyes, skin and respiratory tract.

Environment: The product is not expected to be hazardous to the environment.

Physical and Chemical Hazards: Releases humidity upon decomposition, do not heat in closed containers.

2.2. Label elements

EC No. 244-492-7

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

No pictogram required.

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Precautionary Statements

P261	Avoid breathing dust.
P285	In case of inadequate ventilation wear respiratory protection
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P402	Store in a dry place.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATON INGREDIENTS

3.1. Substances

aluminium hydroxide	>95%	
CAS-No.: 21645-51-2	EC No.: 231-784-4	Registration Number: 01-2119529246-XXXX
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Not classified.	Not classified.	

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

REACH Registration number	01-2119529246-39-XXXX
REACH Registration notes	mono-constituent substance
CAS-No.	21645-51-2
EC No.	244-492-7
Gross Formula	AlH3O3
Ingredient notes	All substances contained in this product have been notified to the Classification and Labelling (C&L)
Composition Comments	This product does not contain any hazardous ingredients, or ingredients with national workplace exposure limits.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation:	Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.
Ingestion:	Rinse mouth thoroughly and give plenty of water to drink. Seek medical advice if necessary.
Skin Contact:	Clean by mechanical dry removal. Subsequently rinse with water.
Eye Contact:	Immediately flush with plenty of water or eyewash solution for up to 10 minutes.
Contact physician if irritation persists.	

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	The product is non-combustible. Use fire-extinguishing media appropriate for surrounding Materials.
Unsuitable extinguishing media:	None

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5.2. Special hazards arising from the substance or mixture

None.

5.3. Advice for firefighters

None

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing (see Section 8). Avoid inhalation of dust.

6.2. Environmental precautions

No special environmental precautions required.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Dispose of absorbed material in accordance within local regulations.

6.4. Reference to other sections

For waste disposal, see section 13..

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advise on safe handling:

Avoid inhalation of dust and contact with skin and eyes.

Advise on fire and explosion protection:

Not applicable.

7.2. Conditions for safe storage, including any incompatibilities

Dry storage at moderate temperatures

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

See product information

8.1. Control parameters

Name	STD	TWA – 8 Hrs		STEL – 15 Min		Notes
aluminium hydroxide		No std.	No std.			

Ingredient Comments

No exposure limits noted for ingredient(s). COSHH - see note in section 16.8.2. Exposure controls

aluminium hydroxide (CAS: 21645-51-2)

DNEL

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

PNEC

Freshwater	74.9	µg/l
STP	20	µg/l

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 equipment must be provided.

Hand protection

Wear suitable protective gloves conforming to EN 374.

Eye protection:

Wear approved safety goggles.

Other Protection:

Provide eyewash station and safety shower.

Hygiene measures

When using do not eat, drink, or smoke.

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Environmental

No special exposure controls required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Powder, dust.
Colour	White.
Odour	Odourless
Solubility	Insoluble.
Initial Boiling Point and Boiling Range:	2980°C at 760 mmHg.
Melting Point (°C)	decomposes before melting at > 200°C.
Relative Density	2.44 @ 20°C.
Solubility Value (G/100G) (N-Octanol/Water)	0.000009. Scientifically unjustified.
Explosive properties	non explosive.

9.2. Other information

Particle Size (Micron)	variable
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SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No specific reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal conditions of storage and use. See section 7. Dehydrates to aluminum oxide upon heating above 200°C.

10.3. Possibility of hazardous reactions

Not determined.

Hazardous Polymerisation	Will not polymerise.
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10.4. Conditions to avoid

Temperatures > 200°C

10.5. Incompatible materials

Materials To Avoid	Strong acids, Bases, alkalis (inorganic).
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10.6. Hazardous decomposition products

No hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxic Dose 1 - LD 50	>5000 mg/kg (oral rat)
Toxic Conc. - LC 50	>2.3 mg/l/4h (inh-rat)
Acute Toxicity	
Oral LD50	> 2000 mg/kg Rat.
Dermal LD50	Scientifically unjustified.
Inhalation LC50	> 2.3 mg/l (dust/mist) Rat 4 hours

Respiratory or skin sensitization

Skin sensitisation Guinea pig maximization test (GPMT)	Not Sensitising.
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Germ cell mutagenicity

Genotoxicity - In Vitro Gene Mutation	Negative
Genotoxicity - In Vivo Chromosome aberration	Negative

Reproductive Toxicity

Reproductive Toxicity - Fertility One-generation study	NOAEL 1000 mg/kg/day Oral Rat F1
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Specific target organ toxicity - repeated exposure

STOT Respiratory System – Lungs	NOAEL 302 mg/kg Inhalation. Rat. Morphological changes that are potentially reversible but provide clear evidence of marked organ dysfunction.
Inhalation	Dust may irritate respiratory system or lungs. Fine particles may penetrate the lungs. See note about control of dust in section 16.
Ingestion	Gastrointestinal symptoms, including upset stomach.
Skin contact normally.	Not a skin sensitiser. Skin irritation is not anticipated when used
Eye contact	Irritating and may cause redness and pain.

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.

12.1. Toxicity

Owing to the extremely low solubility in water, the toxic levels could not be reached.

Acute Toxicity

Fish	LC50 96 hours > 100 mg/l Freshwater fish
Aquatic Invertebrates	EC50 48 hours > 100 mg/l Daphnia magna
Aquatic Plants	IC50 72 hours > 100 mg/l Scenedesmus subspicatus

12.2. Persistence and degradability

Degradability

The product solely consists of inorganic compounds which are not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative Potential
The product solely consist of inorganic compounds which are not biodegradable.

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 applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

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

SECTION 14: TRANSFORMATION 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.

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14.3 Transport hazard class(es)

None

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

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/l15.pdf>

Approved Classification and Labelling guide (Sixth edition). Chemicals (Hazard Information and Packaging for Supply)

Regulations 2009 (CHIP 4). HSE Books, or download at: <http://www.hse.gov.uk/pubns/books/l131.htm>

Guidance Notes

Workplace Exposure Limits EH40/2007 (as amended).

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.)

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Information Sources

All data cited from Manufacturer's REACH Registration Dossier. Revision Comments Comprehensive revision.

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

Revision Date 04-OCT-13

Revision 07

Supersedes date 10-JUN-13

Risk Phrases In Full

NC Not classified.

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