SAFETY DATA SHEET
HALTEX® AND OPTILOAD®

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

1.1. Product identifier

Product Name	HALTEX® and OPTILOAD®
Grades	HALTEX 300, 302, 304, 310, 315, 330, 330C
	OPTILOAD LV-410 XP, LP-410 XP, LV-110, LV-75, LV-45, LV-20, LP-304, LV-21, LV-200
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:	TOR Minerals International, Inc.
	722 Burleson St.
	Corpus Christi, Texas 78402
	Tel +1-361-883-5591
	Fax: +1-361-883-7616
	sales@torminerals.com

1.4. Emergency telephone number

TOR Minerals International Inc.	Tel: +1-361-883-5591

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.

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 CAS-No.: 21645-51-2	>99% Registration Number: 01-2119529246-39-XXXX
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	01-2119529246-39-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

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)

See product information

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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

aluminum 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.

Environmental
No special exposure controls required.

SECTION 9: PHYSICAL AND CHEMICAL PROTERTIES

9.1. Information on basic physical and chemical properties

Appearance	Powder, dust.
Colour	White.
Odour	Odourless
Solubility	Insoluble.
Initial Boiling Point and Boiling Range:	decomposes at 720°C.
Melting Point (°C)	decomposes before melting at > 200°C.
Relative Density	2.44 @ 20°C.
Solubility Value (G/100G)	0.000009.
(N-Octanol/Water)	Scientifically unjustified.
Explosive properties	non explosive.

9.2. Other information

Particle Size (Micron)	variable

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.

10.4. Conditions to avoid

Temperatures > 200°C

10.5. Incompatible materials

Materials To Avoid	Strong acids.

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.

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

Specific target organ toxicity - repeated exposure

STOT	NOAEL 302 mg/kg Inhalation. Rat.
Respitory System – Lungs	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

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

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 > 10,000 mg/l Freshwater fish
Aquatic Invertebrates	EC50 48 hours > 10,000 mg/l Daphnia magna
Aquatic Plants	IC50 72 hours > 10,000 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.

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

EINECS (EU) Status	: On the inventory, or in compliance with the inventory
AICS (AU) Status	: On the inventory, or in compliance with the inventory
DSL (CA) Status	: On the inventory, or in compliance with the inventory
ENCS (JP) Status	: On the inventory, or in compliance with the inventory
KECI (KR) Status	: On the inventory, or in compliance with the inventory
PICCS (PH) Status	: On the inventory, or in compliance with the inventory
IECSC (CN) Status	: On the inventory, or in compliance with the inventory
ISHL (JP) Status	: On the inventory, or in compliance with the inventory
NZIOC Status	: On the inventory, or in compliance with the inventory
HSNO (NZ) Status	: On the inventory, or in compliance with the inventory
TSCA Status	: On the inventory, or in compliance with the inventory

15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

None.

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