Material Safety Data Sheet

Vertal 92

Section 1. Chemical Product and Company Identification

Common/Trade name : **Vertal 92**

Supplier : L.V. Lomas Limited
99 Summerlea Road
Brampton, Ontario
L6T 4V2 CANADA

Synonym : Not available.

Chemical name : TALC

Chemical family : Silicate.

Material Uses : Not available.

Manufacturer : Luzenac America, Inc
9000 East Nichols Ave.
Englewood, Colorado
U.S.A. 80112 1-800-325-0299

Code : LUZ0890

CI# : Not applicable.

CAS # : 14807-96-6

Warehouse Class. : Class I Commodity

EMERGENCY SPILL INFORMATION	: PHILIP ENTERPRISE INC. 1-800-567-7455 (CANADA)
OTHER INFORMATION	: 905.458.1555

Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
Talc - a hydrous magnesium silicate	14807-96-6	~98 - 100	**OSHA PEL (United States).** TWA: 20 mppcf **ACGIH TLV (United States).** TWA: 2 mg/m³ Form: Respirable dust **DFG MAK** TWA: 2 mg/m³ **NIOSH REL (United States).** TWA: 2 mg/m³
Dolomite - a magnesium calcium carbonate	16389-88-1	<2	Not available.
Chlorite - a magnesium aluminum silicate	1318-59-8	<2	Not available.
Magnesite - a magnesium carbonate	546-93-0	<2	**OSHA PEL (United States).** TWA: 15 mg/m³ Form: Total dust TWA: 5 mg/m³ Form: Respirable fraction **ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Total dust

Section 3. Hazards Identification

Physical State and Appearance : Solid. (Powder.)

Emergency Overview : CAUTION!
MAY CAUSE RESPIRATORY TRACT IRRITATION

Avoid breathing dust. Keep container closed. Use with adequate ventilation.

Routes of Entry : Eye contact. Skin contact. Inhalation. Ingestion.

Potential Acute Health Effects

Eyes : Direct contact with dust may cause mechanical irritation of the eyes. Repeated exposure may cause conjunctivae inflammation.

Skin : Direct contact or prolonged contact may cause dryness, or may cause mild irritation if an allergic predisposition exists.

Inhalation : Exposure to a large concentration of airborne dust of this material may cause mechanical irritation of the mucous membranes and respiratory tract.

Ingestion : This material is considered to be harmless and inert when ingested.

Medical Conditions Aggravated by Overexposure: : Not available.

Overexposure/Signs/Symptoms : No additional remark.

See Toxicological Information (section 11)

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Section 4. First Aid Measures

Eye Contact : Wash eyes with large amounts of water or normal saline solution. If irritation or redness develops, seek medical attention.

Skin Contact : Apply common skin moisturizers to relieve dryness. Irritations are uncommon; however, if irritation or redness develops, seek medical attention. Broken skin can be cleansed with mild soap and water.

Inhalation : Remove from exposure area to fresh air. If breathing has stopped, perform artificial respiration and get medical attention immediately. Keep person warm and at rest. Treat symptomatically and supportively.

Ingestion : Treat symptomatically and supportively. If vomiting occurs, keep head lower than hips to prevent aspiration. Do not induce vomiting unless directed to do so by medical personnel. Seek medical attention.

Notes to Physician : Not available.

Section 5. Fire Fighting Measures

Flammability of the Product : Non-flammable.

Autoignition Temperature : Not applicable.

Flash Points : None.

Flammable Limits : Not applicable.

Products of Combustion : Not applicable.

Fire Hazards in Presence of Various Substances : No specific information is available in our database regarding the flammability of this product in presence of various materials.

Explosion Hazards in Presence of Various Substances : Risks of explosion of the product in presence of mechanical impact: None.
Risks of explosion of the product in presence of static discharge: None.
No specific information is available in our database regarding the product's risks of explosion in the presence of various materials.

Fire Fighting Media and Instructions : Special fire fighting procedures or extinguishing media are not applicable.

Protective Clothing (Fire) : Not applicable.

Special Remarks on Fire Hazards : No additional remark.

Special Remarks on Explosion Hazards : No additional remark.

Section 6. Accidental Release Measures

Small Spill and Leak : Not available.

Large Spill and Leak : For large spills, shovel or sweep up (while keeping dispersion of dust in air to a minimum) and place into suitable sealed containers for reclamation or later disposal. Residue should be cleaned up using a high-efficiency particulate filter vacuum. The use of water wash down is not recommended. Wet material can cause a surface used for walking to become extremely slippery.

Section 7. Handling and Storage

Handling : Not available.

Storage : Preserve in sealed containers to prevent dispersion of dust in air. Store in a cool, dry and well ventilated location. Normal precautions common to good manufacturing practice should be used in handling and storage.

Section 8. Exposure Controls, Personal Protection

Engineering Controls : Provide local exhaust or process enclosure ventilation to meet published exposure limits. Where there is a possibility that an employee's eyes may be exposed to bulk quantities or high concentrations of airborne dust of this substance, the employer should provide an eye wash fountain within the immediate work area for emergency use.

Personal Protection

Eyes : Employees should wear dust-resistant safety goggles to prevent eye contact with high concentrations of airborne dust of this substance.

Body : Not available.

Respiratory : Use NIOSH/MSHA approved dust mask. Determine the appropriate type by consulting the respirator manufacturer.

Hands : Protective gloves are not required, but may be worn to prevent skin dryness or irritation due to skin allergy.

Feet : Not available.

Protective Clothing (Pictograms) :

Personal Protection in Case of a Large Spill : Safety goggles. Dust respirator. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

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Talc	**OSHA PEL (United States).** TWA: 20 mppcf **ACGIH TLV (United States).** TWA: 2 mg/m³ Form: Respirable dust **NIOSH REL (United States).** TWA: 2 mg/m³
Magnesite	**OSHA PEL (United States).** TWA: 15 mg/m³ Form: Total dust TWA: 5 mg/m³ Form: Respirable fraction **ACGIH TLV (United States).** TWA: 10 mg/m³ Form: Total dust

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	:	Solid. (Powder.)
Color	:	Greyish white.
Odor	:	Slight earthy odour.
Taste	:	Not available.
Molecular Weight	:	Not available.
Molecular Formula	:	$3MgO{\cdot}4SiO_2{\cdot}H_2O$
pH (1% Soln/Water)	:	Slightly basic.
Boiling/Condensation Point	:	Not available.
Melting/Freezing Point	:	Not available.
Critical Temperature	:	Not available.
Specific Gravity	:	2.8 (Water = 1)
Vapor Pressure	:	Not available.
Vapor Density	:	Not available.
Volatility	:	Not available.
Odor Threshold	:	Not available.
Evaporation Rate	:	Not available.
VOC	:	Not available.
Viscosity	:	Not available.
$LogK_{ow}$	:	Not available.
Ionicity (in Water)	:	Not available.
Dispersion Properties	:	Not available.
Solubility	:	Water, Ethanol, Acetone: <1 mg/ml @ 21°C Cold acids: insoluble Alkalies: insoluble

Section 10. Stability and Reactivity

Stability and Reactivity	:	The product is stable.
Conditions of Instability	:	Decomposition temperature: 900°C - 1000°C (1652°F - 1832°F).
Incompatibility with Various Substances	:	Incompatibilities: None.
Remarks on Reactivity/Incompatibility	:	Conditions to avoid: Prevent dispersion of dust in air.
Hazardous Decomposition Products	:	None hazardous.
Hazardous Polymerization	:	Will not occur.

Section 11. Toxicological Information

Special Remarks on Toxicity to Animals	:	Repeated ingestion of large doses of talc for 13 and 10 successive days by rabbits and mice, revealed negative teratogenic and carcinogenic results. Talc: NTP Status: Not listed (currently under review). A two year inhalation study demonstrated clear evidence of carcinogenic activity in female rats at exposure levels of 18 mg/m³. Some evidence of carcinogenic activity was observed in male rats at the same level. No evidence of carcinogenic activity was found in mice (NTP TR-421) Talc: Tumorigenic Data: TCLo: ihl-rat 11 mg/m³/1Y-1; TDLo: imp-rat 200 mg/kg/
Chronic Effects on Humans	:	CARCINOGENIC EFFECTS: Talc IARC (Group 3) - Not classifiable as a human carcinogen (human/animal inadequate evidence); ACGIH (Group A4) - Not classifiable as a human carcinogen; Not listed by OSHA. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
Other Toxic Effects on Humans	:	Talc: Skin and Eye Irritation Data: skn-hmn 300 ug/3D-I MLD
Special Remarks on Chronic Effects on Humans	:	Repeated or prolonged inhalation of airborne dust of this material may cause scarring of the lungs (pulmonary fibrosis), with shortness of breath, chronic cough, and respiratory assisted heart failure. Prolonged exposure to talc can produce a mild symptomatic pneumoconiosis.
Special Remarks on Other Toxic Effects on Humans	:	No additional remark.

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Section 12. Ecological Information

Ecotoxicity Data

Not available.

Products of Degradation : No specific information is available in our database regarding the degradation of products.

Special Remarks on the Products of Biodegradation : No additional remark.

Section 13. Disposal Considerations

Waste Information : Dry material can be landfilled. Talc is not considered a hazardous waste by RCRA criteria (40 CFR 261). Observe all Federal, State and Local regulations when disposing of this material.

EPA WASTE NO : Not available.

Consult your local or regional authorities.

Section 14. Transport Information

Regulatory Information	UN number	Proper shipping name	Class	Packing Group	Label	Additional information
DOT Classification	Not applicable.	Not applicable.	Not a DOT controlled material (United States).	Not applicable.		Not applicable.
TDG Classification	Not applicable.	Not applicable.	Not regulated under TDG (Canada).	Not applicable.		Not applicable.
ADR/RID Class	Not applicable.	Not applicable.	Not controlled under ADR (Europe).	Not applicable.		Not applicable.
IMDG Class	Not applicable.	Not applicable.	Not controlled under IMDG.	Not applicable.		Not applicable.
IATA-DGR Class	Not applicable.	Not applicable.	Not controlled under IATA.	Not applicable.		Not applicable.

Section 15. Regulatory Information

HCS Classification : Not controlled under the HCS (United States).

U.S. Federal Regulations : TSCA inventory: Talc (14807-96-6); Magnesite (546-93-0).

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean water act (CWA) 307: No products were found.
Clean water act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.

State Regulations : Illinois: Talc.
Pennsylvania RTK: Talc.
Florida: Talc.
Massachusetts RTK: Talc.
New Jersey: Talc.
California prop. 65: No products were found.

WHMIS (Canada) : WHMIS CLASS D-2B: Material causing other toxic effects (TOXIC).
CEPA DSL: Talc (14807-96-6); Magnesite (546-93-0).

CEPA NDSL: Dolomite (16389-88-1)

International Regulations

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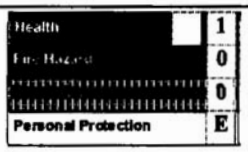
EINECS : Talc (238-877-9); Dolomite (240-440-2); Chlorite (215-285-9); Magnesite (208-915-9)

DSCL (EEC) : Not available.

International Lists : This product on this MSDS, or all its components, are included on the following countries' chemical inventories, as noted: AICS (Australia), ECL (Korea: KE-32773), SWISS (Giftliste: G-6939), PICCS (Philippines).
MITI (Japan) - Not listed - (not required for natural minerals)

Section 16. Other Information

Hazardous Material Information System (U.S.A.)



National Fire Protection Association (U.S.A.)

References : - Manufacturer's Material Safety Data Sheet.
- Sax's Dangerous Properties of Industrial Materials, 9th edition, CDROM Version 1.0

Date of printing : **6/10/2003.**

Date of issue : **6/3/2003.**

Date of Previous Issue : **6/3/2003.**

Version : **2.01**

Validated by Regulatory Affairs Department.

Indicates information that has changed from previously issued version.

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