

## MATERIAL SAFETY DATA SHEET

### Material Identification & Explanatory Information

<b>Material Name &amp; Synonyms</b>	Vinyl; vinyl-coated fabric; leathercloth; synthetic leathercloth. This MSDS is applicable exclusively to product use at temperatures under 150°F. It does not apply to product designed to be used in vacuforming at elevated temperatures.
<b>CAS Name &amp; Number</b>	Mixture
<b>Manufacturer / Supplier</b>	Morbern Incorporated 80 Boundary Road, Cornwall, Ontario, Canada. K6H 6M1 Tel.: +01 613 932 8811 Fax: +01 613 932 0162 / 9779
<b>Contact</b>	Dale Witty, Environmental & Safety Manager, Morbern Inc. Tel.: +01 613 937 2478
<b>Document Preparation Date</b>	January 23, 2013
<b>Material Uses</b>	Upholstery and Trim

#### Summary of document

The format of this document is arranged in such a way as to proceed with the information in order of most likely requirement for a material which has a long history of popular domestic use with no practical hazardous characteristics known to the author which cannot be attributed to improper formulation or abuse.

### Health Hazard Information

This material is typically a combination of films of polyvinyl chloride made flexible with plasticizers and containing various additives, which determine the desired physical, protective and aesthetic properties. The PVC films would normally, but not necessarily, be attached to a fabric for greater structural strength.

In accordance with the definition in the OSHA Hazard Communication Standard, 29CFR 1910.1200 and the Canadian CPR, these products are considered manufactured articles.

As a properly fused product, all the components are bound together, chemically and / or physically, as an intimate matrix for which there is no significant airborne emission under normal use, with the exception of residual V.O.C.s which will rapidly dissipate during processing.

Primary route(s) of entry: EYES depending on use SKIN depending on use  
MOUTH no INHALATION depending on use

#### ACUTE EFFECTS

V.O.C.s present in the roll-form goods may cause nuisance irritation of the eyes, skin and respiratory organs.

#### **Allergic and psychosomatic reactions**

It is recognized that some individuals may display allergic or psychosomatic reactions to a wide range of commonly innocuous substances, which may include the material. There are no instances of such reactions known to the author, thus such reactions are assumed unusual and unpredictable. Notwithstanding, individuals with known allergic or psychosomatic conditions, or in a state of unusual physical sensitivity

(e.g. pregnant; recovering from physical trauma or illness) should be considered at risk of reaction, and should be monitored, protected and treated accordingly. Notice of any such reactions should be reported to the author of this document.

#### CHRONIC EFFECTS

No evidence is known which suggests that the product should be the cause of any long-term-ill-health effects.

<b>Toxicological Information</b>
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No toxicity data is available on these products. Since no exposure to the hazardous components occurs during normal use, it is expected to be non-toxic under normal conditions.

<b>Ecological Information</b>
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This product is an inert solid. It is not expected to present any hazard to the environment under normal conditions.

<b>Personal Protection Information</b>
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No special protective equipment should be necessary to handle the material, except in the situations detailed under "Engineering / Environmental Control" and to prevent contact that may result in allergic reaction.

#### Engineering / Environment Controls

**Situation:** High-speed cutting or abrasive (sueding) process.  
**Hazard:** Nuisance, possibly irritant dust.  
**Control:** Local extraction and ventilation; side-shielded goggles.  
If extraction and ventilation is inadequate, a dust respirator (D, APF=5), selected with NIOSH approval under 42CFR 84, should be provided.

See the NIOSH "Guide to the Selection and Use of Particulate Respirators" (DHHS [NIOSH] publication 96-101) or the CSA publication Z94.4-93 "Selection, Use and Care of Respirators" for further selection guidelines.

<b>First Aid Measures</b>
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**Eyes** (dust): Remove subject to clean air and encourage rapid blinking to produce tears, then flush the eye(s) with eyebath or lukewarm water for a minimum of 10 minutes. If symptoms persist or escalate, continue flushing the eye(s) with water and seek immediate professional medical attention.

**Inhalation** (dust): Remove subject to clean air, and, if necessary, encourage coughing to expel contaminant(s). If the subject complains of increasing irritation or constriction of the throat, as may be indicative of anaphylactic reaction, remain with the subject while immediate professional medical attention is being sought, in case the subject becomes distressed or unconscious and requires help with breathing.

**Skin** It is not perceived that any harm can be afflicted by the material on or through the skin, beyond the possibility of allergic or psychosomatic reactions. If skin irritation or blemishes do develop, wash on and around the affected area with non-abrasive, hypoallergenic soap and water and rinse well. If symptoms persist or escalate, seek professional medical attention.

**Ingestion** In the unlikely event that the material is actually swallowed (as may be possible in the case of an unsupervised child), it is advisable to seek professional medical advice concerning helping the passage or removal of the material, as the digestive process will not appreciably reduce the material to a convenient shape or size for evacuation. This advise if obviously the more essential the larger the ingested piece. There are no instances of vinyl ingestion known to the author, but common sense dictates that if any ill effects do develop beyond the expected cramps and discomfort associated with swallowing indigestible material, seek immediate professional medical attention.

<b>Fire &amp; Explosion Information</b>
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**Conditions of Flammability** The material is not flammable without the application of a persistent ignition source. Some types of the material are self-extinguishing.

**Hazardous Combustion Products** Principally carbon oxides, and hydrogen chloride (irritant, corrosive acid vesicant) and other organic gases.

**Extinguishing Media** Water, carbon dioxide, chemical foam, dry powder, sand, soil: selection depends on availability and placing of fire extinguishers and the severity of the fire.

**Fire-Fighting Procedures & Equipment**

For small, contained, undeveloped fires, alert the other occupants of the building, then use a recommended fire extinguisher according to the instructions on the canister. Follow standard evacuation and investigation procedures to be sure there is no further hazard.

Larger, manageable fires may be contained and / or extinguished by a properly trained and equipped fire-fighting team. The team should wear self-contained breathing apparatus with positive pressure, and protective clothing that meets the CAN / CGSB-155.20 standard is advisable. Immediate alarm and evacuation of the building is essential, and professional firefighters must be called for back up and assessment of further hazards.

Large, unmanageable fires must be left to professional fire fighters, as should any large fire in an area where an explosion is likely.

Breathing apparatus should continue to be worn when investigating further hazards in an enclosed space where there is still smoke and fumes and smouldering debris.

**Flash Point and Determination Method** Not determined.

**Flammability Limits** Not determined.

**Autoignition Temperature** Not determined.

**Explosion Data Sensitivity to Impact** There are no incidents, nor references, nor records known to the author linking ignition of the material with physical shock.

**Sensitivity to Static Discharge** There are no incidents nor references nor records known to the author linking ignition of the material to static discharge.

#### **Reactivity Data**

**Conditions of Chemical Instability** Material is stable under normal conditions - no vigorous polymerization, decomposition nor condensation.

**Hazardous Decomposition Products** None.

**Conditions of Reactivity** None: no self-reaction under conditions of shock or increase of temperature or pressure; also no reaction with water producing toxic gases.

**Incompatible Substances** powerful oxidizing agents (e.g. perchlorate, dichromate) and strong acids over protracted exposure.

#### **Spill & Disposal Information**

**Spill or Leak Procedure** Not applicable.

**Waste Disposal** Unused pieces of the material must be disposed of in strict accordance with federal, state / provincial and local regulations.  
For guidelines on waste management, consult 40 CFR 221 through 229.

#### **Physical & Chemical Properties**

**Physical State** Solid

**Appearance & Odour** Flexible sheet with leather-like appearance, colour varies; vague odour

**Odour Threshold** Unknown

**Specific Gravity (water = 1)** 0.9 - 1.8

**% Volatile** 2 maximum

**Vapour Pressure** Unknown

**Vapour Density (air = 1)** Unknown

**Evaporation Rate** Unknown

**Solubility in Water** Negligible

**Water Reactivity** None

**Coeff. Water / Oil Distribution** Not applicable

**pH** Not applicable

**Melting Point** Significant softening above 200°F; molten flow above 400°F.

## Boiling Point

Mixture of substances with variously interactive boiling ranges.

### Preparation Information & Explanation of References

This document has been prepared using considerations outlined in the US DoL OSHA 29CFR Ch.XVII§1910.1200, paragraph (g) and the Justice Canada HPA CPR §12 and Schedule I.

For US technical and regulatory information, go to [www.epa.gov/epahome/lawreg.htm](http://www.epa.gov/epahome/lawreg.htm), which in addition to USEPA-governed topics (air-,land-,and water-pollution regulation), also contains links to the Code of Federal Regulations, the Federal Register, and specific state identification and regulation of materials perceived to be toxic.

For Canadian technical and regulatory information, go to [www.hc-sc.gc.ca/ehp/ehd/psb/whmis/msds.htm](http://www.hc-sc.gc.ca/ehp/ehd/psb/whmis/msds.htm), which in addition to the guidelines for preparation and use of safety data sheets, also contains direct links to all the regulatory, legislative, and informative sites necessary for control and use of materials perceived to be toxic.

Toxicological information quoted in this document was searched through:

OSHA 29CFR 1910, subpart Z "Toxic and Hazardous Substances"

(available through [www.access.gpo.gov/nara/cfr/index.html](http://www.access.gpo.gov/nara/cfr/index.html))

HPA "Ingredient Disclosure List"

(available through <http://canada.justice.gc.ca/en/laws/H-3/SOR-88-64/txt.html>)

ACGIH "Guide To Occupational Exposure Values"

(available from ACGIH, Inc., 1330 Kenper Meadow Drive, Cincinnati, Ohio, 45240-1634)

NIOSH "Pocket Guide to Chemical Hazards"

(available from EPCRA Document Distribution Center, 11029 Kenwood Road, Cincinnati, Ohio, 45242)

US EPA "Emergency Planning and Community Right-To-Know §313 List of Toxic Chemicals"

(available from EPCRA Document Distribution Center, 11029 Kenwood Road, Cincinnati, Ohio, 45242)

"Hazardous Chemicals Desk Reference" - Sax & Lewis, Sr.

(Van Nostrand Reinhold : ISBN 0-442-28208-7)

#### Explanation of abbreviations

ACGIH:	American Conference of Governmental Industrial Hygienists
APF:	Assigned Protection Factor
CAN/CGSB:	Canadian General Standards Board
CAS:	Chemical Abstracts Service
CFR:	Code of Federal Regulations
ceiling:	The concentration that shall not be exceeded during the workday
CNS:	Central nervous system
CP65:	California Proposition 65
CPR:	Controlled Product Regulations
CSA:	Canadian Standards Association
DHHS:	Department of Health and Human Services
DoL:	Department of Labor
EPCRA:	Emergency Planning and Community Right-To-Know Act
HPA:	Hazardous Products Act
IARC:	International Agency for Research on Cancer
IDL:	Ingredient Disclosure List
IWCC:	Intergovernmental WHMIS Coordinating Committee
LC <sub>50</sub> :	lethal concentration, administered by inhalation, required to kill 50% of a test population

#### Explanation of abbreviations

LD<sub>50</sub>: Lethal dosage, administered orally or cutaneously, required to kill 50% of a test population

mg/cu.m:	Milligrams per cubic meter
mg/kg:	Milligrams per kilogram (same as parts per million, on weight per weight basis)
mg/L:	Milligrams per liter (same as parts per million, on weight per volume basis)
mL/kg:	Milliliters per kilogram (same as parts per million, on volume per weight basis)
MSDS:	Material safety data sheet
NIOSH:	National Institute for Occupational Safety and Health
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limits
PPE:	Personal protective equipment
ppm:	Parts per million
PVC:	Polyvinyl chloride
STEL:	Short Term Exposure Limit-usually a 15 minute TWA that should not be exceeded during the workday
TLV:	Threshold Limit Values
TRI:	Toxics Release Inventory
TWA:	Time-Weighted Average exposure level for a conventional 8-hour workday in a 40 hour workweek.
US EPA:	United States Environmental Protection Agency
VOC:	Volatile organic compound (as defined in 40CFR Ch.1 §51.100 (s))
WHMIS:	Workplace hazardous Materials Information System