

STELMAX - WHITE ADHESIVE 1985

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MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION

Product identifier : **STELMAX - WHITE ADHESIVE 1985**

Product Code(s) : 9-C1985-13/5L-0 *

Product Use : Adhesive for bonding various plastics.

Chemical Family : Mixture.

Supplier's name and address:

Ferco Ferrures de bâtiment

2000, rue Berlier
Laval, QC, Canada
H7L 4S4

Manufacturer's name and address:

Refer to Supplier

Information Telephone # : (514) 973-1437

24 Hr. Emergency Tel # : Not available.

SECTION 2 - HAZARDS IDENTIFICATION

Classification : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:
Class B2 (Flammable Liquids);
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

OSHA: This material is classified as hazardous under OSHA regulations (29CFR 1910.1200). Hazardous classification:
Flammable liquid;
Acute Health Hazard;
Chronic Health Hazard.

Emergency Overview : Liquid. Ethereal odour.
DANGER! Extremely flammable liquid and vapour. Vapour may cause flash fire! After prolonged storage, may release explosive peroxides in the presence of air. Harmful if inhaled. May cause nausea, vomiting, headache and other central nervous system effects. May cause respiratory irritation. Causes eye irritation. Contains material which may cause adverse blood system effects. Prolonged or repeated skin contact may cause drying and irritation. Prolonged overexposure may cause liver and kidney effects.

POTENTIAL HEALTH EFFECTS:

Signs and symptoms of short-term (acute) exposure

Inhalation : May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. Fumes from heated product or mists may irritate respiratory tract. Could result in pulmonary edema (fluid accumulation). Symptoms of pulmonary edema (chest pain, shortness of breath) may be delayed.

Skin : May cause mild skin irritation.

Eyes : May cause moderate to severe irritation. Symptoms will include pain, redness and tearing. May cause corneal damage.

Ingestion : May cause irritation of mouth, throat, and stomach. May cause nausea, vomiting, and diarrhea.

Effects of long-term (chronic) exposure

: Prolonged or repeated contact may cause drying, cracking and defatting of the skin. Contains material which may cause adverse blood system effects. Prolonged overexposure may cause liver and kidney effects.

Carcinogenic status : See TOXICOLOGICAL INFORMATION, Section 11.

Additional health hazards : See TOXICOLOGICAL INFORMATION, Section 11.

Potential environmental effects

: See ECOLOGICAL INFORMATION, Section 12.

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SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Wt.%
Tetrahydrofuran	109-99-9	60.00 - 100.00
Silica, amorphous fumed	112945-52-5	1.00 - 5.00
Polyvinyl chloride / polyvinyl acetate copolymer	9003-22-9	25.00 - 30.00

SECTION 4 - FIRST AID MEASURES

- Inhalation** : Remove exposed person to fresh air immediately. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stopped, begin artificial respiration. Get medical attention.
- Skin contact** : Wash off immediately with soap and plenty of water. Immediately flush with plenty of water, while removing contaminated clothing. If skin irritation or rash occurs, seek medical advice/attention. Wash contaminated clothing before reuse.
- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- Ingestion** : Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Have victim rinse mouth with water, then give one to two glasses of water to drink. Get medical attention.
- Notes For Physician** : Treat symptomatically. This product is a CNS depressant.

SECTION 5 - FIRE FIGHTING MEASURES

Fire hazards/conditions of flammability

- : Extremely flammable liquid and vapour Vapours may form explosive mixture with air. Closed containers may rupture if exposed to excess heat or flame due to a build-up of internal pressure. Vapours are heavier than air and collect in confined and low-lying areas. Vapours may cause flash fire. Will ignite when exposed to heat, flame and other sources of ignition.

Flammability classification (OSHA 29 CFR 1910.1200)

- : Flammable Liquid Class 1B.

Oxidizing properties

- : None known.

Explosion data: Sensitivity to mechanical impact / static discharge

- : Not expected to be sensitive to mechanical impact. Product will accumulate static charge. Mixtures of vapour and air at concentrations in the flammable range may be ignited by a static discharge of sufficient energy.

Suitable extinguishing media

- : Dry chemical, foam, carbon dioxide and water fog. Do not use water jet, as this may spread burning material.

Special fire-fighting procedures/equipment

- : During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Water spray may be useful in cooling equipment exposed to heat and flame.

Hazardous combustion products

- : Carbon oxides; Hydrogen chloride gas; Phosgene; other unidentified organic compounds.

NFPA Rating

- | | | | |
|--|------------|--------------|-------------|
| 0 - Minimal | 1 - Slight | 2 - Moderate | 3 - Serious |
| : <i>Health: 2 Flammability: 3 Instability: 1 Special Hazards: None</i> | | | |

SECTION 6 - ACCIDENTAL RELEASE MEASURES

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- Personal precautions** : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment including self-contained breathing apparatus. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.
- Environmental precautions** : Do not allow material to contaminate ground water system. For large spills, dike the area to prevent spreading.
- Spill response/cleanup** : Ventilate area of release. Eliminate all ignition sources. Remove combustible materials. Stop the spill at source if it is safe to do so. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.
- Prohibited materials** : Do not use combustible absorbents, such as sawdust.
- Special spill response procedures** : If a spill/release in excess of the EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002). US CERCLA Reportable quantity (RQ): Tetrahydrofuran (1000 lbs / 454 kg).

SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Bond and ground transfer containers and equipment. Ensure adequate ventilation. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks, and open flames. Keep away from oxidizing agents and incompatibles. Keep containers closed when not in use. Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not smoke while using this product.
- Storage requirements** : Store in a cool, dry, well ventilated area, away from heat and ignition sources. Store out of direct sunlight. Inspect all incoming containers to make sure they are properly labelled and not damaged. Keep container tightly closed. Storage facilities should be made of fire resistant materials. For large-scale storage, use a grounded, non-sparking ventilation system, approved explosion-proof equipment and intrinsically safe electrical systems. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Have appropriate fire extinguishers and spill clean-up equipment in or near storage area. Do not eat or smoke in areas of use or storage.
- Incompatible materials** : Avoid caustic alkalis, lithium aluminum hydride, metallic hydroxides, metallic aluminates and oxidizing agents such as peroxides, nitrates, etc.
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u>Exposure Limits</u>				
<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Tetrahydrofuran	50 ppm (skin)	100 ppm (skin)	200 ppm	N/Av
Silica, amorphous fumed	10 mg/m ³ (inhalable) (as PNOS) 3 mg/m ³ (respirable) (as PNOS)	N/Av	20 mppcf (As 'Amorphous silica')	N/Av
Polyvinyl chloride / polyvinyl acetate copolymer	3 mg/m ³ (respirable); 10 mg/m ³ (inhalable) (as 'PNOS')	N/Av	15 mg/m ³ (Total dust); 5 mg/m ³ (respirable) (as 'nuisance dust')	N/Av

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Ventilation and engineering measures

: Local exhaust ventilation is preferred to prevent contaminant dispersion into work area.

Respiratory protection

: Respiratory protection is required if the concentrations exceed the TLV. NIOSH-approved respirators are recommended. Seek advice from respiratory protection specialists.

Skin protection

: Impervious gloves must be worn when using this product. Advice should be sought from glove suppliers.

Eye / face protection

: Chemical splash goggles are recommended. A full face shield may also be necessary.

Other protective equipment

: Depending on conditions of use, safety shoes and additional protective clothing may also be necessary. An eyewash station and safety shower should be made available in the immediate working area.

General hygiene considerations

: Avoid contact with skin, eyes and clothing. Avoid breathing vapour or mist. Do not eat, drink, smoke or use cosmetics while working with this product. Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Separate contaminated work clothes from street clothes.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid	Appearance	: clear
Odour	: Ethereal odour	Odour threshold	: N/Av
pH	: N/Av		
Boiling point	: 65 - 67°C (149 - 153°F)	Specific gravity	: 0.9
Melting/Freezing point	: N/Av	Coefficient of water/oil distribution	: N/Av
Vapour pressure (mmHg @ 20° C / 68° F)	: 114 mmHg @ 15°C (59°F)	Solubility in water	: Insoluble.
Vapour density (Air = 1)	: N/Av	Evaporation rate (n-Butyl acetate = 1)	: N/Av
Volatile organic Compounds (VOC's)	: N/Av	Volatiles (% by weight)	: 71
Flash point	: - 27°C (- 16.6°F)		
Flash point Method	: Not available.	Auto-ignition temperature	: 324°C (615.2°F)
Lower flammable limit (% by vol.)	: 1.8	Upper flammable limit (% by vol.)	: 11.8
Flame Projection Length	: N/Av	Flashback observed	: N/Av

Section 10: Stability And Reactivity

Stability and reactivity	: Stable under the recommended storage and handling conditions prescribed. After prolonged storage, may release explosive peroxides in the presence of air.
Hazardous polymerization	: Hazardous polymerisation does not occur.
Conditions to avoid	: Avoid heat, open flames, sparks, static electricity and electrical equipment. Keep away from direct sunlight.
Materials To Avoid And Incompatibility	: See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products	: Peroxides. Refer to Section 5 for additional 'Hazardous combustion products'.

SECTION 11 - TOXICOLOGICAL INFORMATION

Target organs	: Eyes, skin, respiratory system, digestive system, central nervous system.
Routes of exposure	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : NO <i>Skin & Eyes</i> : YES <i>Ingestion</i> : YES
Toxicological data	: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

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<u>Ingredients</u>	<u>LC₅₀(4hr)</u>	<u>LD₅₀</u>	
	<u>inh, rat</u>	<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Tetrahydrofuran	18,200 ppm	1650 mg/kg	N/Av
Silica, amorphous fumed	N/Av	3160 mg/kg	N/Av
Polyvinyl chloride / polyvinyl acetate copolymer	N/Av	N/Av	N/Av

- Carcinogenic status** : Contains the following chemicals listed as confirmed animal carcinogens (A3) by ACGIH: Tetrahydrofuran.
- Reproductive effects** : None known.
- Teratogenicity** : None expected.
- Mutagenicity** : None known.
- Epidemiology** : Not available.
- Sensitization to material** : Not expected to be a skin or respiratory sensitizer.
- Synergistic materials** : None known or reported by the manufacturer.
- Irritancy** : Moderate to severe eye irritant. Mild skin irritant
- other important hazards** : CNS depression may result from extreme exposures.
- Conditions aggravated by overexposure** : Pre-existing skin or eye disorders, and impaired liver or kidney functions. Pre-existing pulmonary disease.


SECTION 12 - ECOLOGICAL INFORMATION

- Ecotoxicity** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.
- Mobility** : No data is available on the product itself.
- Persistence** : No data is available on the product itself.
- Bioaccumulation potential** : No data is available on the product itself.
- Other Adverse Environmental effects** : No data is available on the product itself.

SECTION 13 - DISPOSAL CONSIDERATIONS

- Handling for Disposal** : Store material for disposal as indicated in Handling and Storage (Section 7). Empty containers retain residue (liquid and/or vapour) and can be dangerous. Do not cut, weld, drill or grind on or near this container.
- Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations. Contact your local, state, provincial or federal environmental agency for specific rules.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.


SECTION 14: TRANSPORT INFORMATION

Regulatory Information	UN Number	Shipping Name	Class	Packing Group	Label
TDG	UN1133	ADHESIVES	3	II	
TDG Additional information	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption.				

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49CFR/DOT	UN1133	Adhesives	3	II	
49CFR/DOT Additional information	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. Refer to 49 CFR 173.150(b) and Special Provision 149.				

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.

CERCLA Reportable Quantity (RQ) (40 CFR 117.302): Tetrahydrofuran (1000 lbs / 454 kg).

SARA TITLE III: Sec. 302, Extremely Hazardous Substances, 40 CFR 355: No Extremely Hazardous Substances are present in this material.

SARA TITLE III: Sec. 311 and 312, MSDS Requirements, 40 CFR 370 Hazard Classes: Fire Hazard; Immediate (Acute) health hazard; Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

SARA TITLE III: Sec. 313, Toxic Chemicals Notification, 40 CFR 372: This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above de minimus concentrations.

US State Right to Know Laws:

California Proposition 65: This product contains a chemical known to the State of California to cause cancer. This product may contain trace levels of the following ingredients: Vinyl chloride monomer.

Other U.S. State "Right to Know" Lists: The following chemicals are specifically listed by individual States: Tetrahydrofuran (CA, MA, MN, NJ, PA, RI); Amorphous silica (MA, MN, NJ, PA).

International Information:

WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). Refer to Section 2 for a WHMIS Classification for this product.

Canadian Environmental Protection Act (CEPA): Mixture. All components of this product are on the Canadian DSL list.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

SECTION 16 - OTHER INFORMATION

HMIS Rating : * - Chronic hazard 0 - Minimal 1 - Slight 2 - Moderate 3 - Serious
Health: *2 *Flammability:* 3 *Reactivity:* 1

Legend : ACGIH: American Conference of Governmental Industrial Hygienists
 CA: California
 CAS: Chemical Abstract Services
 CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
 CFR: Code of Federal Regulations
 CNS: Central Nervous System
 DOT: Department of Transportation
 DSL: Domestic Substances List
 HMIS: Hazardous Materials Identification System
 HSDB: Hazardous Substances Data Bank
 IARC: International Agency for Research on Cancer
 Inh: Inhalation
 MA: Massachusetts
 MN: Minnesota
 mppcf: million particles per cubic foot

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N/Av: Not Available
N/Av: Not Available
NFPA: National Fire Protection Association
NIOSH: National Institute of Occupational Safety and Health
NJ: New Jersey
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PA: Pennsylvania
PEL: Permissible exposure limit
PNOS: Particles Not Otherwise Specified
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island
RTECS: Registry of Toxic Effects of Chemical Substances
SARA: Superfund Amendments and Reauthorization Act
STEL: Short Term Exposure Limit
TDG: Canadian Transportation of Dangerous Goods Act & Regulations
TLV: Threshold Limit Values
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2009.
- 2. International Agency for Research on Cancer Monographs, searched 2010.
- 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2010 (Chempendium, HSDB, RTECs).
- 4. Material Safety Data Sheet from manufacturer.
- 5. US EPA Title III List of Lists October 2006 version.
- 6. California Proposition 65 List February 5, 2010 version.

<p>Prepared for: Ferco Ferrures de bâtiment 2000, Rue Berlier Laval, Qué (Canada), H7L 4S4 Please direct all inquiries to Ferco Ferrures de bâtiment.</p>	
<p>Prepared by: ICC The Compliance Center Inc. http://www.thecompliancecenter.com</p>	 HAZARDOUS MATERIALS REGULATIONS SPECIALISTS

DISCLAIMER OF LIABILITY

This Material Safety Data Sheet was prepared by ICC The Compliance Center Inc using information provided by / obtained from Ferco Ferrures de bâtiment and CCOHS' Web Information Service. The information in the Material Safety Data Sheet is offered for your consideration and guidance when exposed to this product. ICC The Compliance Center Inc and Ferco Ferrures de bâtiment expressly disclaim all expressed or implied warranties and assume no responsibilities for the accuracy or completeness of the data contained herein. The data in this MSDS does not apply to use with any other product or in any other process.

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Revision Information : Sections 2 and 3, switched.
(M)SDS sections updated:
2. HAZARDS IDENTIFICATION;
3. COMPOSITION/INFORMATION ON INGREDIENTS;
5. FIRE-FIGHTING MEASURES;
6. Accidental release measures;
8. EXPOSURE CONTROLS / PERSONAL PROTECTION;
9. PHYSICAL AND CHEMICAL PROPERTIES;
11. TOXICOLOGICAL INFORMATION;
12. ECOLOGICAL INFORMATION;
14. TRANSPORT INFORMATION;
15. REGULATORY INFORMATION.

END OF DOCUMENT