

Material Safety Data Sheet

Parlodion Strips

Section 1 - Chemical Product and Company Identification

MSDS Name: Parlodion Strips

Catalog Number: 10837

Synonyms: Cellulose nitrate; Cellulose tetranitrate; Collodian; Nitrocellulose.

Distributor Identification:

Ladd Research

83 Holly Court

Williston, VT 05495

For information, call: 802-658-4961

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
9004-70-0	Nitrocellulose	99	unlisted
57-13-6	Urea	1	200-315-5

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: yellow-white solid.

Warning! Flammable solid. Material is shock sensitive and potentially explosive. Prolonged or repeated contact causes defatting of the skin with irritation, dryness, and cracking. May cause respiratory and digestive tract irritation. May cause eye and skin irritation. May cause kidney damage. May cause central nervous system effects.

Target Organs: Kidneys, central nervous system.

Potential Health Effects

Eye: Contact with eyes may cause severe irritation, and possible eye burns. May cause lacrimation (tearing), blurred vision, and photophobia. May cause chemical conjunctivitis and corneal damage.

Skin: Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. May cause skin irritation and possible burns.

Ingestion: May cause central nervous system depression, kidney damage, and liver damage. Symptoms may include: headache, excitement, fatigue, nausea, vomiting, stupor, and coma. May cause nausea, vomiting, abdominal pain, and increased salivation.

Inhalation: May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause adverse central nervous system effects including headache, convulsions, and possible death. Olfactory fatigue may occur. Can produce delayed pulmonary edema.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. Prolonged or repeated exposure may cause permanent eye damage.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: Do NOT use mouth-to-mouth resuscitation. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes. Use water spray to keep fire-exposed containers cool. Vapor may cause flash fire. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. This chemical poses an explosion hazard. Flammable solid. May burn rapidly with flare burning effect. May re-ignite after fire is extinguished. This material is an explosion hazard when exposed to heat, mechanical shock, friction or when agitated.

Extinguishing Media: For large fires, use water spray, fog or regular foam. Contact professional fire-fighters immediately. For small fires, use dry chemical, carbon dioxide, sand, earth, water spray or regular foam. Cool containers with flooding quantities of water until well after fire is out.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 3

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Remove all sources of ignition.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Material is heat, shock and/or friction sensitive. Use care in handling and storage. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Keep container tightly closed. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep away from strong acids.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Nitrocellulose	none listed	none listed	none listed
Urea	none listed	none listed	none listed

OSHA Vacated PELs: Nitrocellulose: No OSHA Vacated PELs are listed for this chemical. Urea: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Appearance: yellow-white

Odor: none reported

pH: Not applicable.

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Evaporation Rate: Not applicable.

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Insoluble in water

Specific Gravity/Density: 1.66

Molecular Formula: C₁₂H₁₆M₄O₁₈x

Molecular Weight: 160.112

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. May be shock-sensitive. Unstable if heated.

Conditions to Avoid: Ignition sources, dust generation, excess heat, temperatures above 55°C, mechanical shock, friction.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, carbon dioxide.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:

CAS# 9004-70-0: QW0970000

CAS# 57-13-6: YR6250000

LD50/LC50:

CAS# 9004-70-0:

Oral, mouse: LD50 = >5 gm/kg;

Oral, rat: LD50 = >5 gm/kg;

CAS# 57-13-6:

Oral, mouse: LD50 = 11 gm/kg;

Oral, rat: LD50 = 8471 mg/kg;

Carcinogenicity:

CAS# 9004-70-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 57-13-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found**Teratogenicity:** No information found**Reproductive Effects:** No information found**Mutagenicity:** No information found**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	FLAMMABLE SOLIDS, ORGANIC, N.O.S.	No information available.
Hazard Class:	4.1	
UN Number:	UN1325	
Packing Group:	II	

Section 15 - Regulatory Information

US FEDERAL**TSCA**

CAS# 9004-70-0 is listed on the TSCA inventory.

CAS# 57-13-6 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 9004-70-0: immediate, fire, reactive.

CAS # 57-13-6: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

CAS# 9004-70-0 is considered highly hazardous by OSHA.

STATE

CAS# 9004-70-0 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

CAS# 57-13-6 can be found on the following state right to know lists: Minnesota.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN

Risk Phrases:

R 10 Flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 38 Irritating to skin.

Safety Phrases:

S 25 Avoid contact with eyes.

WGK (Water Danger/Protection)

CAS# 9004-70-0: 0

CAS# 57-13-6: 1

Canada - DSL/NDSL

CAS# 9004-70-0 is listed on Canada's DSL List.

CAS# 57-13-6 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B4, D2B, F.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List**Section 16 - Additional Information**

MSDS Creation Date: 9/02/1997

Revision #7 Date: 9/2011

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Ladd Research be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Ladd Research has been advised of the possibility of such damages.