

LINATEX 14 A ANTI ABRASION CEMENT

May-20-2009 CW4650-94

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

LINATEX 14 A ANTI ABRASION CEMENT

STATEMENT OF HAZARDOUS NATURE

CONSIDERED & HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

SUPPLIER

Company: Linatex Corporation of America

Address:

1550 Airport Road

Gallatin, Tennessee 37066

USA

Telephone: +1 615 2302100

Fax: +1 615 2302009

PRODUCT USE

» Used according to manufacturer's directions.

Section 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

RISK

Harmful if swallowed.

Possible risk of harm to the unborn child.

HARMFUL - May cause lung damage if swallowed.

Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Irritating to eyes and skin.

Flammable.

Vapours may cause drowsiness and dizziness.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

» Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

EYE

» There is evidence that material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Severe inflammation may be expected with pain. There may be damage to the cornea. Unless treatment is prompt and adequate there may be permanent loss of vision. Conjunctivitis can occur following repeated exposure. » The liquid produces a high level of eye discomfort and is capable of causing pain and severe conjunctivitis. Corneal injury may develop, with possible permanent impairment of vision, if not promptly and adequately treated.

SKIN

» Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.

INHALED

» The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME

CAS RN %

toluene

108-88-3 38-48

methyl ethyl ketone

39-44

Section 4 - FIRST AID MEASURES

SWALLOWED

- · If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.
- · Avoid giving milk or oils.
- · Avoid giving alcohol.

EYE

- » If this product comes in contact with the eyes:
- · Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- · If pain persists or recurs seek medical attention.
- · Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- » If skin contact occurs:
- · Immediately remove all contaminated clothing, including footwear.
- · Flush skin and hair with running water (and soap if available).
- · Seek medical attention in event of irritation.

INHALED

- · If fumes or combustion products are inhaled remove from contaminated area.
- · Lay patient down. Keep warm and rested.
- · Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.
- · Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.
- Transport to hospital, or doctor.

Section 5 - FIRE FIGHTING MEASURES

Flash Point (°F): 73.4 (TCC) Lower Explosive Limit (%): 1.0 Upper Explosive Limit (%): 11.5 Autoignition Temp (°F): 946.94

EXTINGUISHING MEDIA

- · Foam.
- · Dry chemical powder.
- · BCF (where regulations permit).
- Carbon dioxide.
- · Water spray or fog Large fires only.

FIRE FIGHTING

- · Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- · Wear breathing apparatus plus protective gloves.
- · Prevent, by any means available, spillage from entering drains or water course.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- · Use water delivered as a fine spray to control fire and cool adjacent area.
- · Avoid spraying water onto liquid pools.
- · DO NOT approach containers suspected to be hot.
- · Cool fire exposed containers with water spray from a protected location.
- · If safe to do so, remove containers from path of fire.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- · Liquid and vapour are flammable.
- · Moderate fire hazard when exposed to heat or flame.
- · Vapour forms an explosive mixture with air.
- · Moderate explosion hazard when exposed to heat or flame.
- · Vapour may travel a considerable distance to source of ignition.
- · Heating may cause expansion or decomposition leading to violent rupture of containers,
- · On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include: carbon dioxide (CO2), other pyrolysis products typical of burning organic material.

Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.

FIRE INCOMPATIBILITY

· Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- · Remove all ignition sources.
- · Clean up all spills immediately.
- · Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- \cdot Contain and absorb small quantities with vermiculite or other absorbent material.
- · Wipe up.
- · Collect residues in a flammable waste container.

MAJOR SPILLS

- · Clear area of personnel and move upwind.
- · Alert Fire Brigade and tell them location and nature of hazard.
- · May be violently or explosively reactive.
- · Wear breathing apparatus plus protective gloves.

- · Prevent, by any means available, spillage from entering drains or water course.
- · No smoking, naked lights or ignition sources.
- · Increase ventilation.
- · Stop leak if safe to do so.
- · Water spray or fog may be used to disperse / absorb vapour.
- · Contain spill with sand, earth or vermiculite.
- · Use only spark-free shovels and explosion proof equipment.
- · Collect recoverable product into labelled containers for recycling.
- · Absorb remaining product with sand, earth or vermiculite.
- · Collect solid residues and seal in labelled drums for disposal.
- · Wash area and prevent runoff into drains.
- · If contamination of drains or waterways occurs, advise emergency services.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

» Contains low boiling substance:

Storage in sealed containers may result in pressure buildup causing violent rupture of containers not rated appropriately.

- · Check for bulging containers.
- · Vent periodically
- · Always release caps or seals slowly to ensure slow dissipation of vapours.
- · Avoid all personal contact, including inhalation.
- · Wear protective clothing when risk of overexposure occurs.
- · Use in a well-ventilated area.
- · Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- · Avoid smoking, naked lights or ignition sources.
- · Avoid generation of static electricity.
- · DO NOT use plastic buckets.
- · Earth all lines and equipment.
- Use spark-free tools when handling.
- · Avoid contact with incompatible materials.
- · When handling, DO NOT eat, drink or smoke.
- · Keep containers securely sealed when not in use.
- · Avoid physical damage to containers.
- · Always wash hands with soap and water after handling.
- · Work clothes should be laundered separately.
- · Use good occupational work practice.
- · Observe manufacturer's storing and handling recommendations.
- · Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.
- DO NOT allow clothing wet with material to stay in contact with skin.

RECOMMENDED STORAGE METHODS

- · Packing as supplied by manufacturer.
- · Plastic containers may only be used if approved for flammable liquid.
- · Check that containers are clearly labelled and free from leaks.
- · For low viscosity materials (i): Drums and jerry cans must be of the non-removable head type. (ii): Where a can is to be used as an inner package, the can must have a screwed enclosure.
- · For materials with a viscosity of at least 2680 cSt. (23 deg. C)
- · For manufactured product having a viscosity of at least 250 cSt. (23 deg. C)
- · Manufactured product that requires stirring before use and having a viscosity of at least 20 cSt (25 deg. C)
- (i): Removable head packaging;
- (ii): Cans with friction closures and
- (iii): low pressure tubes and cartridges may be used.
- · Where combination packages are used, and the inner packages are of glass, there must be sufficient inert cushioning material in contact with inner and outer packages
- In addition, where inner packagings are glass and contain liquids of packing group I there must be

sufficient inert absorbent to absorb any spillage, unless the outer packaging is a close fitting moulded plastic box and the substances are not incompatible with the plastic.

STORAGE REQUIREMENTS

- · Store in original containers in approved flammable liquid storage area.
- · Store away from incompatible materials in a cool, dry, well-ventilated area.
- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- · No smoking, naked lights, heat or ignition sources.
- Storage areas should be clearly identified, well illuminated, clear of obstruction and accessible only to trained and authorised personnel adequate security must be provided so that unauthorised personnel do not have access.
- Store according to applicable regulations for flammable materials for storage tanks, containers, piping, buildings, rooms, cabinets, allowable quantities and minimum storage distances.
- · Use non-sparking ventilation systems, approved explosion proof equipment and intrinsically safe electrical systems.
- · Have appropriate extinguishing capability in storage area (e.g. portable fire extinguishers dry chemical, foam or carbon dioxide) and flammable gas detectors.
- · Keep adsorbents for leaks and spills readily available.
- Protect containers against physical damage and check regularly for leaks.
- · Observe manufacturer's storing and handling recommendations.

In addition, for tank storages (where appropriate):

- · Store in grounded, properly designed and approved vessels and away from incompatible materials.
- · For bulk storages, consider use of floating roof or nitrogen blanketed vessels; where venting to atmosphere is possible, equip storage tank vents with flame arrestors; inspect tank vents during winter conditions for vapour/ ice build-up.
- · Storage tanks should be above ground and diked to hold entire contents.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

Source	Material	TWA ppm	Peak ppm
US ACGIH Threshold Limit Values (TLV)	toluene (Toluene)	20	
US OSHA Permissible Exposure Levels (PELs) - Table Z2	toluene (Toluene (Z37.12-1967))		300

PERSONAL PROTECTION

RESPIRATOR

Type A Filter of sufficient capacity

EYE

- · Safety glasses with side shields.
- · Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

- · Wear chemical protective gloves, eg. PVC.
- · Wear safety footwear or safety gumboots, eg. Rubber.

OTHER

- · Overalls.
- · PVC Apron.
- · PVC protective suit may be required if exposure severe.
- · Eyewash unit.
- · Ensure there is ready access to a safety shower.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Floats on water.

Molecular Weight: Not Applicable Melting Range (°F): Not Available Solubility in water (g/L): Immiscible pH (1% solution): Not Available

Volatile Component (%vol): Not Available Relative Vapour Density (air=1): 2.63-3.03

Lower Explosive Limit (%): 1.0 Autoignition Temp (°F): 946.94

State: Liquid

Boiling Range (°F): 163.4- 185 Specific Gravity (water=1): 0.88-0.92 pH (as supplied): Not Available

Vapor Pressure (mmHg): 43.504 @ 20 deg C

Evaporation Rate: Not Available Flash Point (°F): 73.4 (TCC) Upper Explosive Limit (%): 11.5

Decomposition Temp (ºF): Not Available

Viscosity: Not Available

APPEARANCE

Red flammable liquid with a characteristic solvent odour; does not mix with water

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- · Presence of incompatible materials.
- · Product is considered stable.
- · Hazardous polymerisation will not occur.

STORAGE INCOMPATIBILITY

· Avoid reaction with oxidising agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

TOXICITY AND IRRITATION

No data for this material.

CARCINOGEN

toluene

International Agency for

Group

3

Research on Cancer (IARC)

Carcinogens

toluene

toluene

US EPA Carcinogens Listing US ACGIH Threshold Limit

Values (TLV) - Carcinogens

Carcinogenicity

Carcinogen Category

D A4

Section 12 - ECOLOGICAL INFORMATION

This material and its container must be disposed of as hazardous waste.

Ecotoxicity

Ingredient

Persistence: Water/Soil

Persistence: Air

Bioaccumulation

Mobility

Linatex 14 A

Anti Abrasion

No data

Cement

toluene

LOW

MED

LOW

MED

Section 13 - DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

A. General Product Information

Ignitability characteristic: use EPA hazardous waste number D001 (waste code I)

B. Component Waste Numbers

When toluene is present as a solid waste as a discarded commercial chemical product, off-specification species, as a container residue, or a spill residue, use EPA waste number U220 (waste code T).

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- · Containers may still present a chemical hazard/ danger when empty.
- · Return to supplier for reuse/ recycling if possible.

Otherwise:

- · If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.
- · Where possible retain label warnings and MSDS and observe all notices pertaining to the product.

Section 14 - TRANSPORTATION INFORMATION

DOT:

Symbols:

None

Hazard class or Division:

3

Identification Numbers:

UN1133

PG:

T11, TP1, TP8,

Label Codes:

3

Special provisions:

TP27

Packaging: Exceptions:

201

Packaging: Non-bulk:

243

Quantity limitations: Passenger

30 L

Packaging: Exceptions:

201

aircraft/rail:

Quantity Limitations: Cargo

aircraft only:

1 L

Vessel stowage: Location:

В

Vessel stowage: Other:

None

Hazardous materials descriptions and proper shipping names:

Adhesives, containing a flammable liquid

Air Transport IATA:

lone
l
20 L
0 L
0 L
2

Shipping Name: ADHESIVES CONTAINING FLAMMABLE LIQUID

Maritime Transport IMDG:

IMDG Class: UN Number:

3

IMDG Subrisk:

None III

EMS Number:

1133 F-E,S-D Packing Group: Special provisions:

223 944 955

Limited Quantities:

5 L

Marine Pollutant:

Not Determined

Shipping Name: ADHESIVES containing flammable liquid

Section 15 - REGULATORY INFORMATION

REGULATIONS

US EPCRA Section 313 Chemical List

Ingredient

CAS

% de minimus

concentration

toluene

108-88-3 1.0

US CERCLA List of Hazardous Substances and Reportable Quantities

Ingredient

CAS RQ

toluene

108-88-3 1000 lb (454 kg)

Linatex 14 A Anti Abrasion Cement (CAS: None):

No regulations applicable

Regulations for ingredients

toluene (CAS: 108-88-3) is found on the following regulatory lists;

GESAMP/EHS Composite List of Hazard Profiles - Hazard evaluation of substances transported by ships

IMO MARPOL 73/78 (Annex II) - List of Noxious Liquid Substances Carried in Bulk

US ACGIH Threshold Limit Values (TLV)

US OSHA Permissible Exposure Levels (PELs) - Table Z1

US OSHA Permissible Exposure Levels (PELs) - Table Z2

US Toxic Substances Control Act (TSCA) - Inventory

US TSCA Section 8 (d) - Health and Safety Data Reporting

Section 16 - OTHER INFORMATION