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1 Identificati	on of the substance/mixture and of the company/undertaking
· 1.1 Product i	
· Trade name:	Vulcanizing Cement
 1.2 Relevant 	er: 14-513, 14-514 identified uses of the substance or mixture and uses advised against evant information available.
· Application of	of the substance / the mixture Rubber compounding
 Manufacture 31 Incorporate 100 Enterpris Newcomersto Phone: (740) 1.4 Emergen ChemTel Inc. 	ed e Dr. own, OH 43832 498-8324 cy telephone number:
2 Hazards id	entification
Classification The following regulation: H4	ation of the substance or mixture n according to Regulation (EC) No 1272/2008 g Hazard Statements are applicable only to the EU regulations and not the US GHS 412. n hazard
Muta. 2	H341 Suspected of causing genetic defects.
Carc. 1B	H350 May cause cancer.
(!)	
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Skin Sens. 1	H317 May cause an allergic skin reaction.
STOT SE 3	H336 May cause drowsiness or dizziness.
Aquatic Chror	nic 3 H412 Harmful to aquatic life with long lasting effects.
 Classification T; Toxic 	n according to Directive 67/548/EEC or Directive 1999/45/EC
R45:	May cause cancer.
🗙 Xn; Harm	ful
R68:	Possible risk of irreversible effects. (Contd. on page 2)

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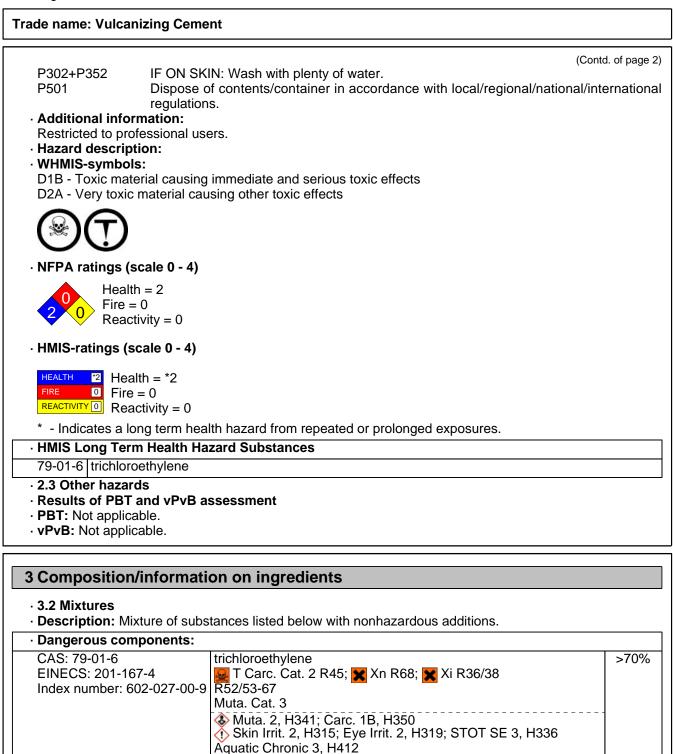
Trade name: Vulcanizing Cement

	(Contd. of page 1)
🗙 Xi; Irritar	nt
R36/38:	Irritating to eyes and skin.
🗙 Xi; Sens	
	-
R43:	May cause sensitisation by skin contact.
The product	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Vapours may cause drowsiness and dizziness. concerning particular hazards for human and environment: has to be labelled due to the calculation procedure of the "General Classification guideline ons of the EU" in the latest valid version.
	cation is according to the latest editions of the EU-lists, and extended by company and
literature dat	
	cation is in accordance with the latest editions of international substances lists, and is d by information from technical literature and by information provided by the company.
GHS07 GHS	08
· Signal word	Danger
· Hazard-dete	rmining components of labelling:
trichloroethyl	
Natural rubb	
Hazard state The following	g Hazard Statements are applicable only to the EU regulations and not the US GHS
regulation: H	
H315 Cause	s skin irritation.
	s serious eye irritation.
	ause an allergic skin reaction.
H341 Suspe H350 May ca	cted of causing genetic defects.
	ause drowsiness or dizziness.
	I to aquatic life with long lasting effects.
	ry statements
P281	Use personal protective equipment as required.
P264	Wash thoroughly after handling.
P261 P305+P351+	Avoid breathing mist/vapours/spray. -P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
	(Contd. on page 3)

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Trade name: Vulcanizing Cement (Contd. of page 3) CAS: 9006-04-6 Natural rubber latex 10-25% 🗙 Xi R43 🔿 Skin Sens. 1B, H317 · SVHC 79-01-6 trichloroethylene · Additional information: For the wording of the listed risk phrases refer to section 16. 4 First aid measures · 4.1 Description of first aid measures · General information: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident. Immediately remove any clothing soiled by the product. Take affected persons out into the fresh air. · After inhalation: Supply fresh air; consult doctor in case of complaints. Provide oxygen treatment if affected person has difficulty breathing. In case of irregular breathing or respiratory arrest provide artificial respiration. In case of unconsciousness place patient stably in side position for transportation. · After skin contact: Do not pull solidified product off the skin. Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor. · After eye contact: Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. · After swallowing: Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately. A person vomiting while laying on their back should be turned onto their side. · 4.2 Most important symptoms and effects, both acute and delayed Breathing difficulty Dizziness Coughing Allergic reactions Irritant to skin and mucous membranes. Irritant to eyes. Gastric or intestinal disorders when ingested. Nausea in case of ingestion. Disorientation · Hazards Danger of disturbed cardiac rhythm. Danger of impaired breathing. Vapours may cause drowsiness and dizziness. Carcinogenic. (Contd. on page 5)

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(Contd. of page 4)

May be harmful if inhaled. Repeated exposure may cause skin dryness or cracking. Danger of serious damage to health by prolonged exposure.

- · 4.3 Indication of any immediate medical attention and special treatment needed
- May produce a hepatotoxic effect.

If necessary oxygen respiration treatment.

Vapours may cause drowsiness and dizziness.

5 Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water
- 5.2 Special hazards arising from the substance or mixture During heating or in case of fire poisonous gases are produced.
- 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device. Wear fully protective suit.
- Additional information Evacuate area and fight fire from from the upwind side.

6 Accidental release measures

- · 6.1 Personal precautions, protective equipment and emergency procedures Use respiratory protective device against the effects of fumes/dust/aerosol. Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Keep people at a distance and stay on the windward side. · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water. Prevent from spreading (e.g. by damming-in or oil barriers). Inform respective authorities in case of seepage into water course or sewage system. · 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Pick up mechanically. Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Do not flush with water or aqueous cleansing agents · 6.4 Reference to other sections See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment.
 - See Section 13 for disposal information.

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7 Handling and storage

• **7.1 Precautions for safe handling** Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

Take note of emission threshold.

• Information about fire - and explosion protection: Keep respiratory protective device available.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame. Store only in the original receptacle.

• Information about storage in one common storage facility: Store away from foodstuffs.

Store away from flammable substances.

Store away from oxidizing agents.

Do not store together with acids.

• Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

• 7.3 Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

· 8.1 Control parameters

· Ingredients v	with limit values that require monitoring at the workplace:
79-01-6 trich	loroethylene
PEL (USA)	Long-term value: 100 ppm Ceiling limit: 200; 300* ppm *5-min peak in any 2 hrs
REL (USA)	See Pocket Guide Apps. A and C
TLV (USA)	Short-term value: 135 mg/m³, 25 ppm Long-term value: 54 mg/m³, 10 ppm BEI
EL (Canada)	Short-term value: 25 ppm Long-term value: 10 ppm ACGIH A2, IARC 2A
EV (Canada)	Short-term value: 25 ppm Long-term value: 10 ppm
1330-20-7 xy	lene
IOELV (EU)	Short-term value: 442 mg/m ³ , 100 ppm Long-term value: 221 mg/m ³ , 50 ppm Skin
	(Contd. on page 7)

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		(Contd. of page
PEL (USA)	Long-term value: 435 mg/m ³ , 100 ppm	
REL (USA)	Short-term value: 655 mg/m ³ , 150 ppm	
()	Long-term value: 435 mg/m ³ , 100 ppm	
TLV (USA)	Short-term value: 651 mg/m³, 150 ppm	
	Long-term value: 434 mg/m ³ , 100 ppm	
	BEI	
EL (Canada		
	Long-term value: 100 ppm	
EV (Canada) Short-term value: 650 mg/m³, 150 ppm Long-term value: 435 mg/m³, 100 ppm	
	urther relevant information available.	
	urther relevant information available.	
	with biological limit values:	
	hloroethylene	
BEI (USA)	•	
	Medium: urine	
	Fime: end of shift at end of workweek	
[Parameter: Trichloroacetic acid (nonspecific)	
	0,5 mg/L	
	Medium: blood Fime: end of shift at end of workweek	
	Parameter: Trichloroethanol without hydrolysis (nonspecific)	
'		
-		
	Medium: blood	
	Time: end of shift at end of workweek	
	Parameter: Trichloroethylene (semi-quantitative)	
-		
1	Medium: end-exhaled air	
	Fime: end of shift at end of workweek	
	Parameter: Trichloroethylene (semi-quantitative)	
1330-20-7 x	-	
	1,5 g/g creatinine	
	Medium: urine	
	Fime: end of shift Parameter: Methylhippuric acide	
	Parameter: Methylhippuric acids	
	nformation: The lists valid during the making were used as basis.	
8.2 Exposu		
	otective equipment:	
	etective and hygienic measures:	
	rom foodstuffs, beverages and feed. omen should strictly avoid inhalation or skin contact.	
	remove all soiled and contaminated clothing.	
minoulatory	remere an senea ana contaninated olotining.	(Contd. on pag

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Printing date 25.06.2014 Trade name: Vulcanizing Cement (Contd. of page 7) Wash hands before breaks and at the end of work. Store protective clothing separately. Do not inhale gases / fumes / aerosols. Avoid contact with the eyes and skin. Shower or take a bath at the end of work. **Respiratory protection:** Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. Use suitable respiratory protective device when aerosol or mist is formed. For spills, respiratory protection may be advisable. NIOSH or EN approved organic vapor respirator equipped with a dust/mist prefilter should be used. · Protection of hands: Protective gloves The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Material of gloves PVA gloves Fluorocarbon rubber (Viton) The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · Penetration time of glove material The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. · Eye protection: Safety glasses · Body protection: Solvent resistant protective clothing · Limitation and supervision of exposure into the environment No further relevant information available. · Risk management measures Organizational measures should be in place for all activities involving this product. See Section 7 for additional information. No further relevant information available. (Contd. on page 9)

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9 Physical and chemical properti	es
 9.1 Information on basic physical and General Information Appearance: 	I chemical properties
Form: Colour: · Odour: · Odour threshold:	Liquid Cloudy Sweetish Not determined.
· pH-value:	Not determined.
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Not Determined. 189 ° F / 87 °C
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Not applicable.
· Auto/Self-ignition temperature:	770 ° F / 410 °C
· Decomposition temperature:	Not determined.
· Self-igniting:	Product is not self-igniting.
 Danger of explosion: 	Product does not present an explosion hazard.
 Explosion limits: Lower: Upper: 	8,0 Vol % 10,5 Vol %
· Vapour pressure at 20 °C:	77 hPa
 Density at 20 °C: Relative density Vapour density at 20 °C Evaporation rate 	1,45 g/cm ³ Not determined. 4,54 g/cm ³ (air = 1) Not determined.
 Solubility in / Miscibility with water: 	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water)	: Not determined.
 Viscosity: Dynamic: Kinematic: 9.2 Other information 	Not determined. Not determined. No further relevant information available.

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10 Stability and reactivity

· 10.1 Reactivity

· 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· 10.3 Possibility of hazardous reactions

Reacts with strong acids and oxidizing agents.

Toxic fumes may be released if heated above the decomposition point.

- 10.4 Conditions to avoid Store away from oxidizing agents.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide Chlorine compounds

Chlorine

11 Toxicological information
 • 11.1 Information on toxicological effects • Acute toxicity:
· LD/LC50 values relevant for classification:
79-01-6 trichloroethylene
Oral LD50 2402 mg/kg (mouse)
Dermal LD50 8450 mg/kg (mouse)
Primary irritant effect:
• on the skin: Irritant to skin and mucous membranes.
• on the eye: Irritating effect.
 Sensitization: Sensitization possible through skin contact. Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EL
Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant
Carcinogenic.
Suspected of causing genetic defects.
May cause cancer.
Acute effects (acute toxicity, irritation and corrosivity):
May be harmful if inhaled.
Carcinogenic. Danger through skin adsorption.
• Sensitisation: Sensitization possible by skin contact.
· Repeated dose toxicity:
Repeated exposure may cause skin dryness or cracking.
May cause damage to organs through prolonged or repeated exposure.
Repeated exposures may result in skin and/or respiratory sensitivity. (Contd. on page 11

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• CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): Muta. 2, Carc. 1B

12 Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: The material is harmful to the environment.
- 12.2 Persistence and degradability The product is partially biodegradable. Significant residuals remain.
- · 12.3 Bioaccumulative potential May be accumulated in organism
- · 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- General notes:

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

Harmful to aquatic organisms

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.

- · 12.5 Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

13 Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

· Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

14 Transport information		
 14.1 UN-Number DOT, ADR, IMDG, IATA 14.2 UN proper shipping name DOT 	UN1710 Trichloroethylene	(Contd. on page 12)

Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS

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de name: Vulcanizing Cement	
ADR IMDG, IATA 14.3 Transport hazard class(es)	(Contd. of page 1 1710 TRICHLOROETHYLENE TRICHLOROETHYLENE
DOT	
Toxic	
Class	6.1 Toxic substances.
Label	6.1
ADR	
Class	6.1 (T1) Toxic substances.
Label	6.1
$\langle \rangle$	
Class	6.1 Toxic substances.
	6.1
• 14.4 Packing group • DOT, ADR, IMDG, IATA	III
• 14.5 Environmental hazards:	111
Marine pollutant:	No
14.6 Special precautions for user	Warning: Toxic substances.
Danger code (Kemler):	60
EMS Number:	F-A,S-A
 Segregation groups 14.7 Transport in bulk according to Ann 	Liquid halogenated hydrocarbons
MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
ADR	
Limited quantities (LQ)	5L
Transport category	2
Tunnel restriction code	
UN "Model Regulation":	UN1710, TRICHLOROETHYLENE, 6.1, III

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 15.1 Safety, health and environmental regulations/legislation specific for the United States (USA) SARA 	substance or mixtu
· Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
· Section 313 (Specific toxic chemical listings):	
79-01-6 trichloroethylene	
• TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
· Proposition 65 (California):	
· Chemicals known to cause cancer:	
79-01-6 trichloroethylene	
· Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
· Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
· Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Carcinogenic Categories	
· EPA (Environmental Protection Agency)	
79-01-6 trichloroethylene	Ca
· IARC (International Agency for Research on Cancer)	
79-01-6 trichloroethylene	2
• TLV (Threshold Limit Value established by ACGIH)	
79-01-6 trichloroethylene	A
NIOSH-Ca (National Institute for Occupational Safety and Health)	
79-01-6 trichloroethylene	
· Canada	
· Canadian Domestic Substances List (DSL)	
Not all ingredients listed.	
· Canadian Ingredient Disclosure list (limit 0.1%)	
None of the ingredients is listed.	
· Canadian Ingredient Disclosure list (limit 1%)	
79-01-6 trichloroethylene	

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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· Other regulations, limitations and prohibitive regulations

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

· Substances of very high concern (SVHC) according to REACH, Article 57

79-01-6 trichloroethylene

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H412 Harmful to aquatic life with long lasting effects.
- R36/38 Irritating to eyes and skin.
- R43 May cause sensitisation by skin contact.
- R45 May cause cancer.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapours may cause drowsiness and dizziness.
- R68 Possible risk of irreversible effects.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association GHS: Globally Harmonized System of Classification and Labelling of Chemicals ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) WHMIS: Workplace Hazardous Materials Information System (Canada) DNEL: Derived No-Effect Level (REACH) PNEC: Predicted No-Effect Concentration (REACH) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2 Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Skin Sens. 1B: Sensitisation - Skin, Hazard Category 1B Muta. 2: Germ cell mutagenicity, Hazard Category 2 Carc. 1B: Carcinogenicity, Hazard Category 1B STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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Trade name: Vulcanizing Cement

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3 • **Sources** SDS Prepared by: ChemTel Inc. 1305 North Florida Avenue Tampa, Florida USA 33602-2902 Toll Free North America 1-888-255-3924 Intl. +01 813-248-0573 Website: www.chemtelinc.com