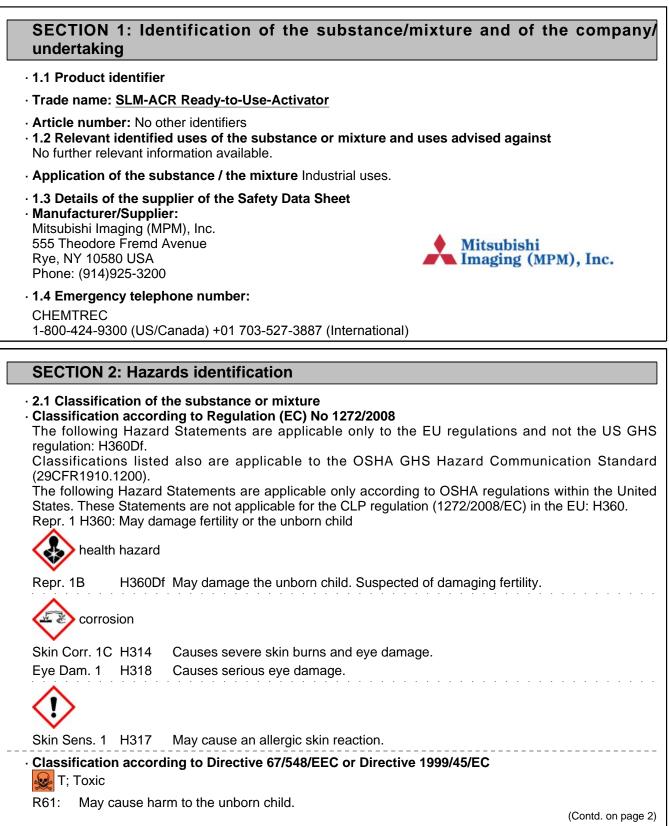
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## Trade name: SLM-ACR Ready-to-Use-Activator (Contd. of page 1) C: Corrosive Causes severe burns. R35: 🗶 Xi; Sensitising May cause sensitisation by skin contact. R43: · Information concerning particular hazards for human and environment: The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version. · Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists, and is supplemented by information from technical literature and by information provided by the company. · Additional information: There are no other hazards not otherwise classified that have been identified. 0 percent of the mixture consists of component(s) of unknown toxicity · 2.2 Label elements Labelling according to Regulation (EC) No 1272/2008 The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H360Df. The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H360. The product is additionally classified and labelled according to the Globally Harmonized System within the United States (GHS). The product is classified and labelled according to the CLP regulation. Hazard pictograms GHS05 GHS07 GHS08 · Signal word Danger · Hazard-determining components of labelling: 2-(2-aminoethylamino)ethanol · Hazard statements The following Hazard Statements are applicable only according to OSHA regulations within the United States. These Statements are not applicable for the CLP regulation (1272/2008/EC) in the EU: H360. The following Hazard Statements are applicable only to the general GHS regulations and not the specific CLP regulation: H360. H360: May damage fertility or the unborn child. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H360Df May damage the unborn child. Suspected of damaging fertility. (Contd. on page 3)

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(Contd. of page 2) · Precautionary statements The following Precautionary Statements are applicable only to the OSHA GHS regulations and not the specific CLP regulation: P310, P363. P261 Avoid breathing mist. P264 Wash thoroughly after handling. P280 Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing should not be allowed out of the workplace. P272 P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. P310 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P363 Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. P333+P313 P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P405 Store locked up. Dispose of contents/container in accordance with local/regional/national/international P501 regulations. · Additional information: Restricted to professional users. · Hazard description: · WHMIS-symbols: D2A - Very toxic material causing other toxic effects E - Corrosive material · NFPA ratings (scale 0 - 4) Health = 3Fire = 0Reactivity = 0· HMIS-ratings (scale 0 - 4) \*3 Health = \*3 HEALTH FIRE • Fire = 0 **REACTIVITY** Reactivity = 0 \* - Indicates a long term health hazard from repeated or prolonged exposures. HMIS Long Term Health Hazard Substances 111-41-1 2-(2-aminoethylamino)ethanol (Contd. on page 4)

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#### · 2.3 Other hazards

## · Results of PBT and vPvB assessment

· PBT: Not applicable.

• **vPvB:** Not applicable.

## **SECTION 3: Composition/information on ingredients**

#### · 3.2 Mixtures

· Description: Mixture of substances listed below with nonhazardous additions.

EINECS: 231-821-4         R31           CAS: 111-41-1         2-(2-aminoethylamino)ethanol           EINECS: 203-867-5         Image: Comparison of the comparison	2,5-10% ≤ 2,5%
EINECS: 203-867-5 🛛 😺 T Repr. Cat. 2, 3 R61; 🔂 C R34; 🗙 Xn R62; 🗙 Xi R43	≤ 2,5%
Index number: 603-194-00-0 Skin Corr. 1B, H360Df Skin Corr. 1B, H314 Skin Sens. 1, H317	
CAS: 1310-73-2       sodium hydroxide         EINECS: 215-185-5       C R35         Index number: 011-002-00-6       Met. Corr.1, H290; Skin Corr. 1A, H314	≤ 2,5%
CAS: 1310-58-3       Potassium hydroxide         EINECS: 215-181-3       Index number: 019-002-00-8         Index number: 019-002-00-8       Index number: 019-002-00-8	≤ 2,5%

#### · Additional information:

For the listed ingredients, the identity and exact percentages are being withheld as a trade secret. For the wording of the listed risk phrases refer to section 16.

### **SECTION 4: First aid measures**

### · 4.1 Description of first aid measures

#### · General information:

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.
- After skin contact: Immediately rinse with water. If skin irritation continues, consult a doctor. Seek immediate medical help for blistering or open wounds.
  After eye contact: Protect unharmed eye. Remove contact lenses if worn, if possible. Rinse opened eye for several minutes under running water. Then consult a doctor.
  After swallowing:

### Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; call for medical help immediately. · 4.2 Most important symptoms and effects, both acute and delayed Breathing difficulty Coughing Allergic reactions Strong caustic effect on skin and mucous membranes. May cause gastro-intestinal irritation if ingested. Nausea in case of indestion. Hazards Danger of impaired breathing. Danger of gastric perforation. Causes serious eye damage. Suspected of damaging fertility or the unborn child. 4.3 Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours. If necessary oxygen respiration treatment. Contains 2-(2-aminoethylamino)ethanol. May produce an allergic reaction.

## **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- For safety reasons unsuitable extinguishing agents: None.
- 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 No further relevant information available.

# **SECTION 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 Particular danger of slipping on leaked/spilled product.
6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Send for recovery or disposal in suitable receptacles.
6.4 Reference to other sections See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

## **SECTION 7: Handling and storage**

 • 7.1 Precautions for safe handling Prevent formation of aerosols.
 Use only in well ventilated areas.
 Avoid splashes or spray in enclosed areas.
 Information about fire - and explasion protections

• 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: Unsuitable material for receptacle: aluminium. Unsuitable material for receptacle: steel. Unsuitable material for receptacle: glass or ceramic. Provide ventilation for receptacles. Avoid storage near extreme heat, ignition sources or open flame. Information about storage in one common storage facility:

 Information about storage in one common storage facility: Store away from foodstuffs.
 Do not store together with acids.

• Further information about storage conditions: Keep container tightly sealed.

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

# **SECTION 8: Exposure controls/personal protection**

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

· 8.1 Control parameters

<ul> <li>Ingredients with limit values that require monitoring at the workplace:</li> </ul>			
1310-73-2 sodium hydroxide			
PEL (USA)	Long-term value: 2 mg/m <sup>3</sup>		
REL (USA)	Ceiling limit: 2 mg/m <sup>3</sup>		
TLV (USA)	Ceiling limit: 2 mg/m <sup>3</sup>		
EL (Canada)	Ceiling limit: 2 mg/m <sup>3</sup>		
EV (Canada)	Ceiling limit: 2 mg/m <sup>3</sup>		
1310-58-3 Potassium hydroxide			
REL (USA)	Ceiling limit: 2 mg/m <sup>3</sup>		
TLV (USA)	Ceiling limit: 2 mg/m <sup>3</sup>		
EL (Canada)	Ceiling limit: 2 mg/m <sup>3</sup>		
EV (Canada)	Ceiling limit: 2 mg/m <sup>3</sup>		
	DNELs No further relevant information available.		
<ul> <li>• PNECs No further relevant information available.</li> </ul>			
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(Contd. of page 6) · Additional information: The lists valid during the making were used as basis. · 8.2 Exposure controls · Personal protective equipment: · General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. 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. **Respiratory protection:** Not required under normal conditions of use. Use suitable respiratory protective device when high concentrations are present. For large spills, respiratory protection may be advisable. · Protection of hands: Protective gloves Rubber 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 Nitrile rubber, NBR Neoprene gloves 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. Not suitable are gloves made of the following materials: PVA gloves · Eve protection: Contact lenses should not be worn. Safety glasses Body protection: Alkaline resistant protective clothing · Limitation and supervision of exposure into the environment Avoid release to the environment.

• Risk management measures See Section 7 for additional information.

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**SECTION 9: Physical and chemical properties**  9.1 Information on basic physical and chemical properties · General Information · Appearance: Form: Liquid Colourless Colour: · Odour: Amine-like · Odour threshold: Not determined. · pH-value at 20 °C (68 °F): 13,0-14,0 Change in condition Melting point/Melting range: Not Determined. **Boiling point/Boiling range:** >100 °C (>212 °F) · Flash point: Not applicable. · Flammability (solid, gaseous): Not applicable. · Auto/Self-ignition temperature: Not determined. · Decomposition temperature: Not determined. Self-igniting: Product is not self-igniting. · Danger of explosion: Product does not present an explosion hazard. · Explosion limits: Lower: Not determined. Upper: Not determined. · Vapour pressure at 20 °C (68 °F): 17 mmHg · Density at 20 °C (68 °F): 1,106 g/cm<sup>3</sup> (9,23 lbs/gal) · Relative density Not determined. · Vapour density Not determined. · Evaporation rate Not determined. · Solubility in / Miscibility with Fully miscible. water: · Partition coefficient (n-octanol/water): Not determined. · Viscosity: **Dynamic:** Not determined. Kinematic: Not determined. 9.2 Other information No further relevant information available.

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# **SECTION 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** Exothermic reaction with acids.
- Reacts with oxidising agents.
- Reacts with fats and oils.
- Corrosive action on metals.

Attacks materials containing glass and silicate.

- Toxic fumes may be released if heated above the decomposition point.
- · 10.4 Conditions to avoid Avoid acids.
- **10.5 Incompatible materials:** No further relevant information available.
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide Sulphur oxides (SOx) Nitrogen oxides (NOx) Ammonia

# **SECTION 11: Toxicological information**

· 11.1 Information on toxicological effects

· Acute toxicity:

· LD/LC50 values relevant for classification:

### 1310-73-2 sodium hydroxide

Oral LD50 2000 mg/kg (rat)

1310-58-3 Potassium hydroxide

Oral LD50 273 mg/kg (rat)

### 111-41-1 2-(2-aminoethylamino)ethanol

Oral LD50 3000 mg/kg (rat)

Dermal LD50 2250 mg/kg (rat)

### · Primary irritant effect:

• on the skin: Strong caustic effect on skin and mucous membranes.

· on the eye: Strong caustic effect.

- · Sensitisation: Sensitisation possible through skin contact.
- Subacute to chronic toxicity: No further relevant information available.

· Additional toxicological information:

The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version: Corrosive

Irritant

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Danger through skin adsorption.

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Toxic and/or corrosive effects may be delayed up to 24 hours.

- Acute effects (acute toxicity, irritation and corrosivity): Causes severe skin burns and eye damage.
- · Repeated dose toxicity:
- May cause damage to organs through prolonged or repeated exposure.

Suspected of damaging fertility or the unborn child.

Repeated exposure may result in skin sensitivity.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

Repr. 1B

## **SECTION 12: Ecological information**

#### · 12.1 Toxicity

- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. If the dilution of the use-level pH-value is considerably reduced, the aqueous waste, emptied into drains, is only low water-dangerous.

### · 12.5 Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

· 12.6 Other adverse effects No further relevant information available.

# **SECTION 13: Disposal considerations**

## · 13.1 Waste treatment methods

#### · Recommendation

Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

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.

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Uncleaned packaging:

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

SECTION 14: Transport information			
<ul> <li>· 14.1 UN-Number</li> <li>· DOT, ADR, IMDG, IATA</li> <li>· 14.2 UN proper shipping name</li> </ul>	UN1719		
Limited Quantity for packages less tha gal).	n 30 kg (66 lb) and inner packagings less than 5 L (1.3		
· DOT, IATA	Caustic alkali liquids, n.o.s. (Potassium hydroxide,		
· ADR, IMDG	Sodium hydroxide, 2-(2-aminoethylamino)ethanol) 1719 CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE, SODIUM HYDROXIDE, 2-(2- AMINOETHYLAMINO)ETHANOL)		
· 14.3 Transport hazard class(es)			
· DOT			
· Class · Label	8 Corrosive substances.		
· ADR			
·Class	8 (C5) Corrosive substances.		
· Label · IMDG, IATA	8		
· Class	8 Corrosive substances.		
· Label · 14.4 Packing group	8		
· DOT, ADR, IMDG, IATA	III		
<ul> <li>· 14.5 Environmental hazards:</li> <li>· Marine pollutant:</li> </ul>	No		
<ul> <li>14.6 Special precautions for user</li> <li>Danger code (Kemler):</li> </ul>	Warning: Corrosive substances. 80		
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(Contd. of page 11) · EMS Number: F-A.S-B · Segregation groups Alkalis · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. Transport/Additional information: · ADR · Limited guantities (LQ) 5L · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml · Transport category 3 · Tunnel restriction code Е · IMDG · Limited quantities (LQ) 5L · Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml UN1719, CAUSTIC ALKALI LIQUID, N.O.S. · UN "Model Regulation": (POTASSIUM HYDROXIDE, SODIUM HYDROXIDE, 2-(2-AMINOETHYLAMINO)ETHANOL), 8, III

## **SECTION 15: Regulatory information**

 $\cdot$  15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  $\cdot$  United States (USA)

· SARA

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients are listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California):

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

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· EPA (Environmental Protection Agency)

None of the ingredients are listed.

· Carcinogenic Categories

· IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

#### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients are listed.

· Canada

· Canadian Domestic Substances List (DSL)

All ingredients are listed.

Canadian Ingredient Disclosure list (limit 0.1%)

111-41-1 2-(2-aminoethylamino)ethanol

· Canadian Ingredient Disclosure list (limit 1%)

1310-73-2 sodium hydroxide

1310-58-3 Potassium hydroxide

#### · 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

None of the ingredients are listed.

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

### **SECTION 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

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H360Df May damage the unborn child. Suspected of damaging fertility.

- R22 Harmful if swallowed.
- R31 Contact with acids liberates toxic gas.
- R34 Causes burns.
- R35 Causes severe burns.
- R43 May cause sensitisation by skin contact.
- R61 May cause harm to the unborn child.

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(Contd. of page 13) R62 Possible risk of impaired fertility. 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 Harmonised 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 Met. Corr.1: Corrosive to metals, Hazard Category 1 Acute Tox. 4: Acute toxicity, Hazard Category 4 Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B Skin Corr. 1C: Skin corrosion/irritation, Hazard Category 1C Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1 Skin Sens. 1: Sensitisation - Skin, Hazard Category 1 Repr. 1B: Reproductive toxicity, Hazard Category 1B · 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