BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # FNC-Ez PATCH

| SECTION I | | | | |
|--|-------------------------|--------------------|--|--|
| MANUFACTURER'S NAME | EMERG | ENCY TELEPHONE NO. | | |
| BioLogic Chemical Works | 248- | 941-0347 | | |
| ADDRESS (Street, City, State and Zip Code) | | | | |
| P.O. BOX 82501 ROCHESTE | R, MI 4830 | 8 | | |
| CHEMICAL NAME AND SYNONYMS | TRADE NAME AND SYNONYMS | | | |
| N/A | Ez-PATCH (PAR | ГА) | | |
| CHEMICAL FAMILY | FORMULA | | | |
| N/A | N/A | | | |

| SECTION II – HAZARDOUS INGREDIENTS | | | | | |
|--|--------------------|----|-------------|--|--|
| HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASE | s | % | TLV (UNITS) | | |
| Bisphenol A/Epichlorohydrin Based Epoxy Resin | (CAS# 25068-38-6) | >1 | N/A | | |
| Oxirane, mono[(C12-14-alkyloxy)methyl] derivates | (CAS# 68069-97-2) | >1 | N/A | | |
| Oxirane, mono[(C12-13-alkyloxy)methyl] derivates | (CAS# 012547-52-6) | >1 | N/A | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | - | • | | |

All components of this product are listed on the E.P.A./TSCA inventory of chemical substances.

| SECTION III – PHYSICAL DATA | | | | | |
|--|-----------------------|--|--------|--|--|
| BOILING POINT °F | 200+ | SPECIFIC GRAVITY (H2O = 1) | 1.13 | | |
| VAPOR PRESSURE (mm. Hg. @ 20°C) | 0.09 | PERCENT VOLATILE BY VOLUME (%) | 0 | | |
| VAPOR DENSITY (AIR = 1) | heavier | EVAPORATION RATE (=1) N-Butyl Acetate | slower | | |
| SOLUBILITY IN WATER | negligible | PH | N/A | | |
| APPEARANCE AND ODOR Clear to yellow viscous liquid with ch | paraetoristic convlot | a adar | | | |

Clear to yellow viscous liquid with characteristic acrylate odor.

| SECTION IV – FIRE AND EXPLOSION DATA | | | | | |
|--------------------------------------|-------------|------------------|-----|------------|--|
| FLASH POINT (Method Used) | | FLAMMABLE LIMITS | Lel | Uel | |
| 200°F | (Setaflash) | | Not | Determined | |
| EXTINGUISHING MEDIA | <u> </u> | <u> </u> | | <u> </u> | |

Water Fog, Dry Chemical, Foam, Carbon Dioxide

SPECIAL FIRE FIGHTING PROCEDURES

Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode. Use water spray to keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS

High temperatures and fire conditions may cause rapid and uncontrolled polymerization which can result in explosions and the violent rupture of containers.

| | SECTION ' | / – HFΔI T | Η ΗΔΖΔΡ | D DΔΤΔ | |
|--|-----------------------|----------------|-----------------|-------------------|-------------------------------------|
| THRESHOLD LIMIT VALUE | PRIMARY ROUTES | | | kin Contact X | Other (Specify) |
| No OSHA/ACGIH limits have | FRIMART ROOTES | OI LIVINI | illialation 3 | KIII COIIIact A | other (opechy) |
| been established | | | | | |
| EFFECTS OF OVEREXPOSURE | | | | | |
| Eyes- moderately irritating. Skin- | moderate irritation, | prolonged co | ntact may ca | use blisters, ma | ay cause skin sensitization. |
| Inhalation- may cause respiratory | ract sensitization/ir | ritation. | - | | |
| EMERGENCY AND FIRST AID PROCED | | | | | |
| Eyes- flush with copious amounts | | | | | |
| attention. Skin- flush with water a | | | | | |
| attention if irritation persists. Inha | | | | | |
| Ingestion- DO NOT INDUCE VOM | | nouth with wat | er, then drink | sips of water – g | get medical attention |
| MEDICAL CONDITIONS AGGRAVATED | | . d D | :41 | 1 | :t tust allansias h |
| Pre-existing skin and eye disorders increased chance of allergic reactions | | | ıın pre-existii | ng skin or resp | iratory tract affergies may have an |
| CARCINOGEN: | • | • | 1400 | | OTUED |
| No | NTP | | IARC | | OTHER |
| 110 | | | | | |
| | SECTIO | N VI – REA | CTIVITY | DATA | |
| STABILITY | UNSTABLE | 14 41 1427 | | ONDITIONS TO A | /OID |
| | STABLE | X | | xcessive heat | |
| INCOMPATIBILITY (Materials to avoid) | | 71 | | | |
| Strong Acids, Bases, Amines, Mer | captans | | | | |
| HAZARDOUS DECOMPOSITION PROD | | | | | |
| Oxides of Carbon, Aldehydes, and | | stances | | | |
| HAZARDOUS | MAY OCCUR | | | CONDITIONS 1 | TO AVOID |
| POLYMERIZATION | WILL NOT OCCU | R | X | None | |
| | | <u> </u> | | | |
| | SECTION VII - | | LEAK PR | ROCEDURES | 5 |
| STEPS TO BE TAKEN IN CASE MATER | | | | | |
| Eliminate all sources of ignition a | | | | Use absorbent | material to soak up spill. Shovel |
| or sweep into container for dispos | al. Wash spill area | with deterge | nt solution. | | |
| WASTE DISPOSAL METHOD In accordance with all Local, Stat | a and Eadaral Day | ulations | | | |
| ili accordance with all Local, Stat | s, and rederal Keg | guiations. | | | |
| SEC | TION VIII – SP | FCIAL PRO | OTECTION | I INFORMA | TION |
| SPECIAL RESPIRATORY PROTECTION | | LOIALTIN | <u> </u> | t iiti OitiiiA | 11011 |
| Use NIOSH approved respirator if | | heated to pro | duce vapors | | |
| VENTILATION LOCAL | | neuteu to pro | unce tupois. | | SPECIAL |
| | al ventilation adequ | iate | | | N/A |
| | ANICAL (General) | | | | OTHER |
| | ıl ventilation adeqı | | | | NA |
| PROTECTIVE GLOVES | | | PROTECTION | | |
| Impervious | | Che | mical Goggle | es | _ |
| OTHER PROTECTIVE EQUIPMENT | | | | | |
| Eyewash and safety shower | | | | | |
| | SECTION | V SDECL | AL DDEC | ALITIONS | |
| DDECAUTIONS TO BE TAKEN IN COMME | SECTION I | | AL PREU | AUTIONS | |
| PRECAUTIONS TO BE TAKEN IN HAND | | | neina A: | d inhelation of | vanore use only with adamsta |
| Avoid contact- wear protective clo | | | | | |
| ventilation. Do not take internally. OTHER PRECAUTIONS | Avoid storage in | areas or exce | ssive neat of | near sources (| or ignition. |
| OTHER PRECAUTIONS | Keen (| Out of Reach | of Children | | |
| | Поср | out of iteach | or children | Γ | NAME |
| | | | | | NAME John Detectors |
| HMIS SYMBOL | | NFPA SY | MBOL | | John Petoskey SIGNAT' |
| [usas su | | | | | John Fit |
| HEALTH 2 HMIS | | FIF | " | | 0 5 |
| FLAMMABILITY 1 SEVERI | | / | 1 | REACTIVITY | TITLE |
| REACTIVITY 0 SERIOUS | | \sim 2 | \ _0 | 5 | Tech Support |
| MODERA SLIGH | | | | / | PREPARATION DATE |
| MINIMA | | TOXICITY > | ヘン | | July 9, 2009 |
| | | | SPECIA | AI . | PHONE NUMBER |
| | | | 3FECIA | ·- | 248-941-0347 |
| | | | | | PAGE TWO: |

Ex-Patch (PART A)

BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # FNC-Ez PATCH

| | SECTION I |
|--|-------------------------|
| MANUFACTURER'S NAME | EMERGENCY TELEPHONE NO. |
| BioLogic Chemical Works | 248-941-0347 |
| ADDRESS (Street, City, State and Zip Code) | |
| P.O. BOX 82501 ROCHI | ESTER, MI 48308 |
| CHEMICAL NAME AND SYNONYMS | TRADE NAME AND SYNONYMS |
| N/A | Z-Patch (PART B) |
| CHEMICAL FAMILY | FORMULA |
| N/A | N/A |

| SECTION II – HAZARDOUS INGREDIENTS | | | | |
|--|-----------------|-------------|------|--|
| HAZARDOUS MIXTURES OF OTHER LIQUIDS | % | TLV (UNITS) | | |
| Modified Polyethylenepolyamine Adducts | | <1 | N/A | |
| Diethylenetriamine | (CAS# 111-40-0) | <1 | N/A | |
| 4,4'-Isopropylidenebisphenol | (CAS# 80-05-7) | <1 | N/A. | |
| Tetraethyleneephentamine | (CAS# 112-57-2) | <1 | N/A. | |
| | | | | |
| | | | | |
| | | | | |

All components of this product are listed on the E.P.A./TSCA inventory of chemical substances.

| SECTION III – PHYSICAL DATA | | | | |
|--|---------|--|------|--|
| BOILING POINT °F | 475+ | SPECIFIC GRAVITY (H2O = 1) | 1.0 | |
| VAPOR PRESSURE (mm. Hg.) | 0.1 | PERCENT VOLATILE BY VOLUME (%) | 0 | |
| VAPOR DENSITY (AIR = 1) | heavier | EVAPORATION RATE (=1) n-Butyl Acetate | 1 | |
| SOLUBILITY IN WATER | slight | PH | 11.5 | |
| APPEARANCE AND ODOR Amber liquid with amine odor | | | | |

| SECTION IV – FIRE AND EXPLOSION DATA | | | | | |
|--------------------------------------|-----------|------------------|-----|-----|--|
| FLASH POINT (Method Used) | | FLAMMABLE LIMITS | Lel | Uel | |
| 200+°F | Setaflash | | N/A | N/A | |

EXTINGUISHING MEDIA

Water Fog, Alcohol Foam, Dry Chemical, Carbon Dioxide

SPECIAL FIRE FIGHTING PROCEDURES

Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode. Use water spray to keep containers cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Nitrogen Oxides and Nitrogen containing organic material may be released upon combustion may cause lung damage (Pulmonary edema).

| | SECTION | V – HEALT | H HAZA | ARD DATA |
|--|----------------|----------------|-----------|---|
| | PRIMARY ROUTES | OF ENTRY I | nhalation | X Skin Contact X Other (Specify) |
| 700 ppm/ H | | | | |
| EFFECTS OF OVEREXPOSURE | | | | |
| may cause sensitization. Inhalation- | | | | act may cause blindness. Skin- corrosive to skin, ract, may be toxic if inhaled. Ingestion- corrosive |
| mouth, throat, and stomach. EMERGENCY AND FIRST AID PROCEDU | DE . | | | |
| | | ids and removi | ng contac | t lenses to ensure complete irrigation- get medical |
| | | | | n wash with soap and water, launder contaminated |
| | | | | and assist breathing as necessary- get medical |
| | | | | ter unless victim is drowsy, convulsing, or |
| unconscious- get medical attention i | | s give one gn | u55 01 Wu | ter unless vieum is drowsy, convuising, or |
| MEDICAL CONDITIONS AGGRAVATED B | Y EXPOSURE | | | |
| Persons with pre-existing eye, skin, | | isorders. | | |
| CARCINOGEN: | NTP | | IARC | OTHER |
| No | | | | • <u>-</u> |
| | | | | |
| | SECTIO | ON VI – REA | CTIVIT | |
| STABILITY | UNSTABLE | | | CONDITIONS TO AVOID |
| | STABLE | X | | Excessive heat and open flames |
| INCOMPATIBILITY (Materials to avoid) | | | | |
| Strong Oxidizers | | | | |
| HAZARDOUS DECOMPOSITION PRODUC | | | 1 | |
| Oxides of Carbon and Nitrogen, Nit | MAY OCCUR | g organic comp | ounus | CONDITIONS TO AVOID |
| POLYMERIZATION | WILL NOT OCCU | ID | X | None |
| | WILL NOT OCCU | JK | X | None |
| | ECTION VII | SDII I OD | IEVK | PROCEDURES |
| STEPS TO BE TAKEN IN CASE MATERIA | | | LLAN | PROCEDURES |
| | | | material | to soak up spill. Shovel or sweep into container for |
| disposal. Clean area with detergent | | Osc absorbent | materiai | to soak up spin. Shover of sweep into container is |
| WASTE DISPOSAL METHOD | Solution. | | | |
| In accordance with all Local, State, | and Federal Re | gulations | | |
| and the same of the same of the same, | | | | |
| SECT | ION VIII – SF | PECIAL PRO | OTECTI | ON INFORMATION |
| SPECIAL RESPIRATORY PROTECTION (| | | | - |
| | | / has been evo | reeded | |
| Use NIOSH approved respirator in | areas where TL | mas occii cac | ccaca. | |

| SECTION VIII – SPECIAL PROTECTION INFORMATION | | | | | |
|---|------------------------------------|------------------|---------|--|--|
| SPECIAL RESPIRATORY PRO | | | | | |
| Use NIOSH approved respi | irator in areas where TLV has been | en exceeded. | | | |
| VENTILATION | LOCAL EXHAUST | | SPECIAL | | |
| | To control TLV | | N/A | | |
| | MECHANICAL (General) | | OTHER | | |
| | To control TLV | | N/A | | |
| PROTECTIVE GLOVES | | EYE PROTECTION | | | |
| Impervious | | Chemical Goggles | | | |
| OTHER PROTECTIVE EQUIPM | ENT | | | | |
| Eyewash and safety shower | r | | | | |

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

CORROSIVE MATERIAL- avoid contact- wear protective clothing and wash thoroughly after using. Avoid inhalation of vapors or mists- use only with adequate ventilation. Do not take internally. Avoid storage in areas of excessive heat or near sources

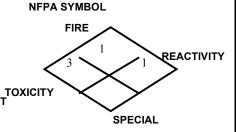
OTHER PRECAUTIONS

of ignition. Keep container closed when not in use. Keep Out of Reach of Children

HMIS SYMBOL

| HEALTH | 3 |
|--------------|---|
| FLAMMABILITY | 1 |
| REACTIVITY | 1 |

HMIS NFPA
SEVERE 4 EXTREME
SERIOUS 3 HIGH
MODERAT 2 MODERATE
SLIGHT 1 SLIGHT TOXICITY
MINIMAL 0 INSIGNIFICANT



NAME
John Petoskey

SIGNATURE

TITLE

Tech Support

PREPARATION DATE
July 9, 2009

PHONE NUMBER
248-941-0347

PAGE TWO:

(PART B)

Ez-Patch

BioLogic Chemical Works MATERIAL SAFETY DATA SHEET

MFG.CODE # FNC-Ez PATCH

| SECTION I | | | | | | | | |
|---|-------------------|--------------------------------------|-----------|----------------|---------------|----------------------|--|--|
| MANUFACTURER'S NAME | OLO | 7110111 | | EMERGENCY 1 | TELEPHONE NO. | | | |
| BioLogic Chemical Works | | | | 248-941-0347 | | | | |
| ADDRESS (Street, City, State and Zip Code) | | | | l . | | | | |
| P.O. BOX 82501 | ROCHEST | ER, MI | | 48308 | | | | |
| CHEMICAL NAME AND SYNONYMS | | TRADE NAME | | | | | | |
| N/A | | Z-PATCH | (P | PART C) | | | | |
| CHEMICAL FAMILY N/A | | FORMULA N/A | | | | | | |
| 1V/A 1V/A | | | | | | | | |
| SECT | ION II – HAZA | RDOUS ING | REDIEI | NTS | | | | |
| | | | | | | | | |
| HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES | | | | | | TLV (UNITS) | | |
| Silicon Dioxide | | | (CAS# | 7631-86-9) | >1 | 10 mg/m ³ | | |
| Sincon Bioxide | | | (CHS) | 7031 00 7) | - 1 | To mg/m | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | <u> </u> | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | 1 | | | <u> </u> | | |
| All components of this product are lists | d on the EDA/ | TCCA inventor | m of ab | amiaal auhatar | m 0.00 | | | |
| All components of this product are liste | u on the E.P.A./ | ISCA inventor | ly of the | emicai substai | nces. | | | |
| SECTION III – PHYSICAL DATA | | | | | | | | |
| BOILING POINT °F | N/A | SPECIFIC GRAVITY (H2O = 1) 70 lbs/ft | | | | | | |
| VAPOR PRESSURE (mm. Hg.) | N/A | DEDCENT VOLATILE DV VOLUME (9/) | | | | | | |
| VAPOR DENSITY (AIR = 1) | | EVADORATION RATE (-4) | | | | | | |
| SOLUBILITY IN WATER | N/A | PH PH | | | N/A | | | |
| APPEARANCE AND ODOR insoluble PH N/A | | | | | | | | |
| Grey granules with no odor. | | | | | | | | |
| | | | | | | | | |
| SECTION IV – FIRE AND EXPLOSION DATA | | | | | | | | |
| FLASH POINT (Method Used) | | FLAMMABLE LIN | MITS | | Lel | Uel | | |
| None | | | | 1 | N/A | N/A | | |
| EXTINGUISHING MEDIA | | | | | | | | |
| Use extinguishing media suitable for fig | hting surrounding | fire. | | | | | | |
| SPECIAL FIRE FIGHTING PROCEDURES | | | | | | | | |
| Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a | | | | | | | | |
| positive mode. UNUSUAL FIRE AND EXPLOSION HAZARDS | | | | | | | | |
| None | | | | | | | | |
| (Continued on reverse side) | | | | | | | | |

| OFOTION V. LIFALTILLIA ZARR RATA | | | | | | | |
|---|------------------------------------|-----------------------------|-------------------|--|--|--|--|
| SECTION V – HEALTH HAZARD DATA | | | | | | | |
| THRESHOLD LIMIT VALUE 10 mg/m³ (as dust) | PRIMARY ROUTES OF ENTR | Y Inhalation X Skin Contact | Other (Specify) | | | | |
| EFFECTS OF OVEREXPOSURE | | | | | | | |
| Eyes- irritation. Inhalation-prolonged or repeated inhalation of dust may cause irritation to nasal and respiratory tracts. | | | | | | | |
| EMERGENCY AND FIRST AID PROCEDURE | | | | | | | |
| Eyes- flush with copious amounts of water lifting lids and removing contact lenses to ensure complete irrigation- get medical | | | | | | | |
| attention. Skin- wash with soap and water. Inhalation- remove to fresh air and assist breathing as necessary- get medical | | | | | | | |
| attention. | | | , , | | | | |
| MEDICAL CONDITIONS AGGRAVATED | BY EXPOSURE | | | | | | |
| None Known | | | | | | | |
| CARCINOGEN: | NTP | IARC OTHER | | | | | |
| 2A | | | | | | | |
| SECTION VI – REACTIVITY DATA | | | | | | | |
| STABILITY | UNSTABLE | CONDITIONS TO | AVOID | | | | |
| | STABLE | X None | | | | | |
| INCOMPATIBILITY (Materials to avoid) | | | | | | | |
| Hydrofluoric Acid | | | | | | | |
| HAZARDOUS DECOMPOSITION PRODU | ICTS | | | | | | |
| None | | | | | | | |
| HAZARDOUS | MAY OCCUR | | S TO AVOID | | | | |
| POLYMERIZATION | WILL NOT OCCUR | X None | | | | | |
| | | | _ | | | | |
| | | OR LEAK PROCEDUR | ES | | | | |
| STEPS TO BE TAKEN IN CASE MATERI | |) | | | | | |
| Sweep up and return to container | for reuse. | | | | | | |
| WASTE DISPOSAL METHOD | 15115 | | | | | | |
| In accordance with all Local, State | , and Federal Regulations. | | | | | | |
| | | | | | | | |
| | | PROTECTION INFORM | ATION | | | | |
| SPECIAL RESPIRATORY PROTECTION (Specify type) | | | | | | | |
| Dust mask | | | 1 | | | | |
| | EXHAUST | | SPECIAL N/A | | | | |
| | | | | | | | |
| | IICAL (General) rol TLV OTHER N/A | | | | | | |
| PROTECTIVE GLOVES | IIIOI ILV | EYE PROTECTION | IV/A | | | | |
| Impervious | | Chemical Goggles | | | | | |
| THER PROTECTIVE EQUIPMENT | | | | | | | |
| Eyewash and safety shower | | | | | | | |
| | | | | | | | |
| SECTION IX – SPECIAL PRECAUTIONS | | | | | | | |
| PRECAUTIONS TO BE TAKEN IN HAND | LING AND STORING | | | | | | |
| Avoid inhalation of dust. Do not t | ake internally. | | | | | | |
| OTHER PRECAUTIONS | | | | | | | |
| Keep Out of Reach of Children | | | | | | | |
| | | | NAME | | | | |
| HMIS SYMBOL | NE | PA SYMBOL | John Petoskey | | | | |
| | MET | | SIGNATURE | | | | |
| HEALTH 1 HMIS | S NFPA | FIRE | gan gut | | | | |
| FLAMMABILITY 0 SEVERE | | 0 DEACTIVITY | TITLE | | | | |
| REACTIVITY 0 SERIOUS | | 0 REACTIVITY | Tech Support | | | | |
| MODERAT | 4 0110117 | $\setminus \times$ / | PREPARATION DATE | | | | |
| SLIGHT MINIMAL | T 1 SLIGHT TOXICIT O INSIGNIFICANT | \sim | July 9, 2009 | | | | |
| MINIMAL | . V INGIGINI IOANI | ODECIAL | PHONE NUMBER | | | | |
| | | SPECIAL | 248-941-0347 | | | | |
| | | | PAGE TWO: | | | | |
| | | | Ez-Patch (PART C) | | | | |