# LMK Epoxy Resin

## SAFETY DATA SHEET

LMK TECHNOLOGIES

MAINLINES | LATERALS | MANHOLES | GASKET SEALS | EQUIPMENT

**Phone:** (815) 433-1275 **Email:** info@lmktechnologies.com **Web:** lmktechnologies.com

# SAFETY DATA SHEET

**LMK Epoxy Resin**

## Section 1. Identification

| | |
|---|---|
| **GHS product identifier** | **LMK Epoxy Resin** |
| **Product code** | 00050486 |
| **Other means of identification** | Bisphenol A epoxy resin, ARALDITE ® GY 6010 US |
| **Product type** | Liquid. |
| **Material uses** | Resin for coating systems |
| **Supplier's details** | LMK Technologies<br>1779 Chessie Lane<br>Ottawa, IL 61350<br><br>Non-Emergency phone: (815) 433-1275 |
| **e-mail address of person responsible for this SDS** | info@lmktechnologies.com |
| **Emergency telephone number (24h/7day)** | Chemtrec: (800) 424-9300 or (703) 527-3887 |

## Section 2. Hazards identification

**OSHA/HCS status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture**

SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
SKIN SENSITIZATION - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 2

**GHS label elements**

**Hazard pictograms**

**Signal word**

Warning

**Hazard statements**

Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.
Toxic to aquatic life with long lasting effects.

**Precautionary statements**

Wear protective gloves: > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber, neoprene, Polyvinyl Chloride (PVC). Wear eye or face protection. Avoid release to the environment. Avoid breathing vapor. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Collect spillage. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

# Section 2. Hazards identification

Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Other hazards which do not result in classification** None known.

# Section 3. Composition/information on ingredients

**Substance/mixture** Substance

| Ingredient name | % | CAS number |
|---|---|---|
| Bisphenol A epoxy resin | 60 - 100 | 25068-38-6 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact** Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion** Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** Causes serious eye irritation.

**Inhalation** No known significant effects or critical hazards.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** Irritating to mouth, throat and stomach.

### Over-exposure signs/symptoms

# Section 4. First aid measures

**Eye contact**
Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation**
No specific data.

**Skin contact**
Adverse symptoms may include the following:
irritation
redness

**Ingestion**
No specific data.

**Indication of immediate medical attention and special treatment needed, if necessary**

**Notes to physician**
No specific treatment. Treat symptomatically. Call medical doctor or poison control center immediately if large quantities have been ingested.

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

**Flash point**
Closed cup: >200°C (>392°F) [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)]

**Extinguishing media**

**Suitable extinguishing media**
Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**
None known.

**Specific hazards arising from the chemical**
In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

**Hazardous thermal decomposition products**
Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds

**Special protective actions for fire-fighters**
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**Methods and materials for containment and cleaning up**

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures**

Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**

Store between the following temperatures: 2 to 40°C (35.6 to 104°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# Section 8. Exposure controls/personal protection

## Control parameters

**Appropriate engineering controls**
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Individual protection measures

**Hygiene measures**
Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**
Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Hand protection**
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber, neoprene, Polyvinyl Chloride (PVC)

**Body protection**
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**
Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Thermal hazards**
Not available.

# Section 9. Physical and chemical properties

## Appearance

**Physical state**
Liquid.

**Color**
Colorless.

**Odor**
Slight

**Odor threshold**
Not available.

**pH**
7 [Conc. (% w/w): 50%]

**Melting point/Freezing point**
Not available.

## Section 9. Physical and chemical properties

| | |
|---|---|
| **Boiling/condensation point** | >200°C (>392°F) |
| **Flash point** | Closed cup: >200°C (>392°F) [DIN 51758 EN 22719 (Pensky-Martens Closed Cup)] |
| **Evaporation rate** | Not available. |
| **Flammability (solid, gas)** | Not available. |
| **Lower and upper explosive (flammable) limits** | Not available. |
| **Vapor pressure** | Not available. |
| **Vapor density** | Not available. |
| **Relative density** | 1.15 to 1.17 |
| **Solubility in water** | practically insoluble |
| **Partition coefficient n-octanol/water** | 3.8 |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | >200°C (>392°F) |
| **Density** | 1.17 to 1.2 g/cm3 [25°C (77°F)] |
| **Viscosity** | Dynamic (room temperature): 10000 to 12000 mPa·s (10000 to 12000 cP) |

## Section 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | No specific test data related to reactivity available for this product or its ingredients. |
| **Chemical stability** | The product is stable. |
| **Possibility of hazardous reactions** | Under normal conditions of storage and use, hazardous reactions will not occur. |
| **Conditions to avoid** | No specific data. |
| **Incompatible materials** | No specific data. |
| **Hazardous decomposition products** | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

| Product/ingredient name | Test | Endpoint | Species | Result |
|---|---|---|---|---|
| Bisphenol A epoxy resin | -<br>OECD 402 Acute Dermal Toxicity<br>OECD 420 Acute Oral Toxicity - Fixed Dose Method | LC0 Inhalation Vapor<br>LD50 Dermal<br><br>LD50 Oral | Rat - Male<br>Rat - Male, Female<br><br>Rat - Female | 0.00001 ppm<br>>2000 mg/kg<br><br>>2000 mg/kg |

**Irritation/Corrosion**

# Section 11. Toxicological information

| Product/ingredient name | Test | Species | Result |
|---|---|---|---|
| Bisphenol A epoxy resin | OECD 404 Acute Dermal Irritation/Corrosion<br>OECD 405 Acute Eye Irritation/ Corrosion | Rabbit<br>Rabbit | Skin - Mild irritant<br>Eyes - Mild irritant |

**Conclusion/Summary**

| | | |
|---|---|---|
| **Skin** | Bisphenol A epoxy resin | Irritating to skin. |
| **Eyes** | Bisphenol A epoxy resin | Irritating to eyes. |
| **Respiratory** | Bisphenol A epoxy resin | No additional information. |

**Sensitization**

| Product/ingredient name | Test | Route of exposure | Species | Result |
|---|---|---|---|---|
| Bisphenol A epoxy resin | - | skin | Mouse | Sensitizing |

**Mutagenicity**

| Product/ingredient name | Test | Result |
|---|---|---|
| Bisphenol A epoxy resin | Experiment: In vitro<br>Subject: Bacteria<br>Metabolic activation: +/-<br>Experiment: In vitro<br>Subject: Mammalian-Animal<br>Cell: Somatic<br>Metabolic activation: +/-<br>Experiment: In vivo<br>Subject: Mammalian-Animal<br>Cell: Germ<br>Experiment: In vivo<br>Subject: Mammalian-Animal<br>Cell: Somatic | Positive<br>Positive<br>Negativ<br>e |

**Carcinogenicity**

| Product/ingredient name | Test | Species | Dose | Exposure | Result/Result type |
|---|---|---|---|---|---|
| Bisphenol A epoxy resin | OECD 453 Combined Chronic Toxicity/ Carcinogenicity Studies | Rat - Male, Female | 15 mg/kg | 2 years; 7 days per week | Negative - Oral - NOAEL |
| | OECD 453 Combined Chronic Toxicity/ Carcinogenicity Studies | Rat - Female | 1 mg/kg | 2 years; 5 days per week | Negative - Dermal - NOEL |
| | OECD 453 Combined Chronic Toxicity/ Carcinogenicity Studies | Mouse - Male | 0.1 mg/kg | 2 years; 3 days per week | Negative - Dermal - NOEL |

# Section 11. Toxicological information

## Reproductive toxicity

| Product/ingredient name | Test | Species | Maternal toxicity | Fertility | Developmental effects |
|---|---|---|---|---|---|
| Bisphenol A epoxy resin | OECD 416 Two-Generation Reproduction Toxicity Study | Rat - Male, Female | Negative | Negative | Negative |

## Teratogenicity

| Product/ingredient name | Test | Species | Result/Result type |
|---|---|---|---|
| Bisphenol A epoxy resin | OECD 414 Prenatal Developmental Toxicity Study | Rat - Female | Negative - Oral |
| | EPA CFR | Rabbit - Female | Negative - Dermal |
| | OECD 414 Prenatal Developmental Toxicity Study | Rabbit - Female | Negative - Oral |

## Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

Not available.

**Information on the likely routes of exposure** Not available.

## Potential acute health effects

**Eye contact** Causes serious eye irritation.

**Inhalation** No known significant effects or critical hazards.

**Skin contact** Causes skin irritation. May cause an allergic skin reaction.

**Ingestion** Irritating to mouth, throat and stomach.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** Adverse symptoms may include the following:
pain or irritation
watering
redness

**Inhalation** No specific data.

**Skin contact** Adverse symptoms may include the following:
irritation
redness

**Ingestion** No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

# Section 11. Toxicological information

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

**Long term exposure**

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

**Potential chronic health effects**

| Product/ingredient name | Test | Endpoint | Species | Result |
|---|---|---|---|---|
| Bisphenol A epoxy resin | OECD 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents | Sub-chronic NOAEL Oral | Rat - Male, Female | 50 mg/kg |
| | OECD 411 Subchronic Dermal Toxicity: 90-day Study | Sub-chronic NOEL Dermal | Rat - Male, Female | 10 mg/kg |
| | OECD 411 Subchronic Dermal Toxicity: 90-day Study | Sub-chronic NOAEL Dermal | Mouse - Male | 100 mg/kg |

**General** Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**Teratogenicity** No known significant effects or critical hazards.

**Developmental effects** No known significant effects or critical hazards.

**Fertility effects** No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**

Not available.

**Other information** Not available.

# Section 12. Ecological information

**Toxicity**

| Product/ingredient name | Test | Endpoint | | Exposure | Species | Result | |
|---|---|---|---|---|---|---|---|
| Bisphenol A epoxy resin | EPA CFR | Acute | EC50 | 72 hours Static | Algae | 9.4 | mg/l |
| | OECD 202 *Daphnia* sp. Acute Immobilisation Test | Acute | EC50 | 48 hours Static | Daphnia | 1.7 | mg/l |
| | Unknown guidelines | Acute | IC50 | 3 hours Static | Bacteria | >100 | mg/l |
| | OECD 203 Fish, | Acute | LC50 | 96 hours | Fish | 1.5 | mg/l |

# Section 12. Ecological information

| | | | | | | |
|---|---|---|---|---|---|---|
| | Acute Toxicity Test OECD 211 *Daphnia Magna* Reproduction Test | Chronic | NOEC | Static 21 days Semi-static | Daphnia | 0.3 mg/l |

## Persistence and degradability

| Product/ingredient name | Test | Period | Result |
|---|---|---|---|
| Bisphenol A epoxy resin | OECD Derived from OECD 301F (Biodegradation Test) | 28 days | 5 % |

**Conclusion/Summary** Bisphenol A epoxy resin Not readily biodegradable.

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| Bisphenol A epoxy resin | Fresh water 4.83 days<br>Fresh water 3.58 days<br>Fresh water 7.1 days | - | Not readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| Bisphenol A epoxy resin<br>Bisphenol A epoxy resin | 3.8<br>3.242 | -<br>31 | low<br>low |

## Mobility in soil

Not available.

**Other adverse effects** No known significant effects or critical hazards.

## Other ecological information

**BOD5** Not determined.

**COD** Not determined.

**TOC** Not determined.

# Section 13. Disposal considerations

**Disposal methods** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Disposal should be in accordance with applicable regional, national and local laws and regulations.**

# Section 14. Transport information

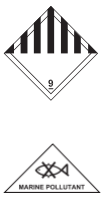
**Proper shipping name**

**DOT** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol a epoxy resin) Marine pollutant

**TDG** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol a epoxy resin) Marine pollutant

**IMDG** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol a epoxy resin) Marine pollutant

**IATA** Environmentally hazardous substance, liquid, n.o.s. (Bisphenol a epoxy resin)

| Regulatory information | UN number | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|
| **DOT Classification** | UN3082 | 9 | III |  | Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. The marine pollutant mark is not required when transported on inland waterways in sizes of s;5 L or s;5 kg. |
| **TDG Classification** | UN3082 | 9 | III |  | The product is not regulated as a dangerous good when transported by road or rail. |
| **IMDG Classification** | UN3082 | 9 | III |  | The marine pollutant mark is not required when transported in sizes of s;5 L or s;5 kg.<br><br>**Emergency schedules (EmS)**<br>F-A S-F |
| | | | | | |

## Section 14. Transport information

| | | | | | |
|---|---|---|---|---|---|
| **IATA Classification** | UN3082 | 9 | III |  | The environmentally hazardous substance mark is not required when transported in sizes of s;5 L or s;5 kg.<br>**Passenger and Cargo Aircraft**<br>Quantity limitation: 450 L<br>Packaging instructions: 964<br>**Cargo Aircraft Only**<br>Quantity limitation: 450 L<br>Packaging instructions: 964 |

PG* : Packing group

## Section 15. Regulatory information

**Safety, health and environmental regulations specific for the product**

**United States Regulations**

| | |
|---|---|
| **TSCA 8(b) inventory** | All components are listed or exempted. |
| **TSCA 5(a)2 final significant new use rule (SNUR)** | No ingredients listed. |
| **TSCA 5(e) substance consent order** | No ingredients listed. |
| **TSCA 12(b) export notification** | No ingredients listed. |
| **SARA 311/312** | Immediate (acute) health hazard |
| **Clean Air Act - Ozone Depleting Substances (ODS)** | This product does not contain nor is it manufactured with ozone depleting substances. |
| **SARA 313** | No ingredients listed. |

| | Ingredient name | % | Section 304 CERCLA Hazardous Substance | CERCLA Reportable Quantity (Lbs) | Product Reportable Quantity (Lbs) |
|---|---|---|---|---|---|
| **CERCLA Hazardous substances** | 1-chloro-2, 3-epoxypropane | 0.001 | Listed | 100 | 10000000 |

**State regulations**

# Section 15. Regulatory information

**PENNSYLVANIA - RTK** No ingredients listed.

**California Prop 65** This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**Canadian regulations**

**CEPA DSL** All components are listed or exempted.

**WHMIS Classes** Class D-2B: Material causing other toxic effects (Toxic).

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

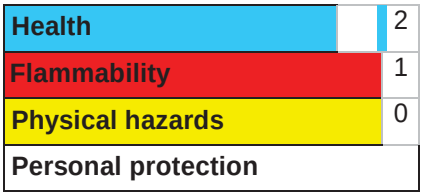
**Brazil Regulations**

**Classification system used** **Norma ABNT-NBR 14725-2 2012**

**International lists** **Australia inventory (AICS)**: All components are listed or exempted.
**China inventory (IECSC)**: All components are listed or exempted.
**Japan inventory**: All components are listed or exempted.
**Korea inventory**: All components are listed or exempted.
**Malaysia Inventory (EHS Register)**: Not determined.
**New Zealand Inventory of Chemicals (NZIoC)**: All components are listed or exempted.
**Philippines inventory (PICCS)**: All components are listed or exempted.
**Taiwan inventory (CSNN)**: Not determined.

# Section 16. Other information

**Hazardous Material Information System (U.S.A.)**




**The customer is responsible for determining the PPE code for this material.**

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**National Fire Protection Association (U.S.A.)**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## Section 16. Other information



| | |
|---|---|
| **Date of printing** | **12/18/2014.** |
| **Date of issue** | 12/18/2014. |
| **Date of previous issue** | No previous validation. |
| **Version** | 1 |

**Indicates information that has changed from previously issued version.**

**Notice to reader**

***While the information and recommendations in this publication are to the best of our knowledge, information and belief accurate at the date of publication, NOTHING HEREIN IS TO BE CONSTRUED AS A WARRANTY, EXPRESS OR OTHERWISE.***

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***THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.***

***Hazards, toxicity and behaviour of the products may differ when used with other materials and are dependent upon the manufacturing circumstances or other processes. Such hazards, toxicity and behaviour should be determined by the user and made known to handlers, processors and end users.***