

SAFETY DATA SHEET

Issue Date 08-Jun-2015

Revision Date 22-Sep-2015

Version 1

| 1. IDENTIFICATION | | |
|---------------------------------------|----------------------------|--|
| Product identifier | | |
| Product Name | Tuffbond 318A | |
| Other means of identification | | |
| Product Code | MS-318A | |
| UN/ID no. | None | |
| Synonyms | None | |
| Recommended use of the chemica | l and restrictions on use_ | |
| Recommended Use | Epoxy Adhesive. | |
| Uses advised against | None known | |
| Details of the supplier of the safety | data sheet | |
| Manufacturer Address | | |
| Hernon Manufacturing Inc. | | |
| 121 Tech Drive | | |
| Sanford, FL 32771 | | |
| 800-527-0004 | | |
| Emergency telephone number | | |
| Company Phone Number | 407-322-4000 | |
| Emergency Telephone | Chemtel 800-255-3924 | |

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

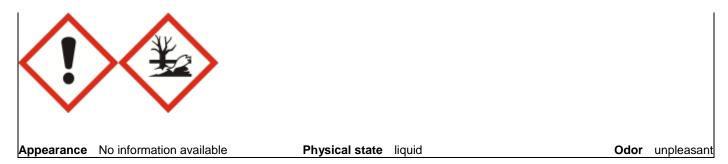
| Skin corrosion/irritation | Category 2 |
|-----------------------------------|-------------|
| Serious eye damage/eye irritation | Category 2A |
| Skin sensitization | Category 1 |

Label elements

Emergency Overview

Warning

Hazard statements Harmful if swallowed Causes skin irritation Causes serious eye irritation May cause respiratory irritation May cause an allergic skin reaction



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling Avoid breathing dust/fume/gas/mist/vapors/spray Contaminated work clothing must not be allowed out of the workplace Keep away from flames and hot surfaces. - No smoking Wear protective gloves/eye protection/face protection

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 advice/attention IF ON SKIN: Wash with plenty of water and soap Take off contaminated clothing and wash it before reuse If skin irritation or rash occurs: Get medical advice/attention In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Toxic to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|--------------------------------------|------------|----------|--------------|
| Epoxy Resin /Bisphenyl A epoxy resin | 25068-38-6 | 95-100 | * |
| CARBON BLACK | 1333-86-4 | 0.1-1.0 | * |
| | | | |

The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
|--------------|--|
| Skin contact | Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse. |

| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. | | |
|---|--|--|--|
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell. | | |
| Most important symptoms and ef | fects, both acute and delayed | | |
| Symptoms | No information available. | | |
| Indication of any immediate medi | Indication of any immediate medical attention and special treatment needed | | |
| Note to physicians | Treat symptomatically. | | |
| | 5. FIRE-FIGHTING MEASURES | | |
| Suitable extinguishing media Use CO2, dry chemical, or foam. | | | |
| Unsuitable extinguishing med | lia Do not use a solid water stream as it may scatter and spread fire. | | |

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Irritating organic vapors.

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| | 7. HANDLING AND STORAGE | |
|-----------------------------------|---|--|
| Methods for cleaning up | Take up mechanically, placing in appropriate containers for disposal. | |
| Methods for containment | Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. | |
| Methods and material for containm | ent and cleaning up | |
| Environmental precautions | Do not allow into any sewer, on the ground or into any body of water. Collect spillage. | |
| Environmental precautions | | |
| Personal precautions | Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. | |

Precautions for safe handling

Advice on safe handling Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Use only with adequate ventilation and in closed systems.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep at temperatures between 46° and 82 °F.

Incompatible materials None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---------------|---|--------------------------------------|--|
| CARBON BLACK | TWA: 3 mg/m ³ inhalable fraction | TWA: 3.5 mg/m ³ | IDLH: 1750 mg/m ³ |
| 1333-86-4 | | (vacated) TWA: 3.5 mg/m ³ | TWA: 3.5 mg/m ³ |
| | | | TWA: 0.1 mg/m ³ Carbon black in |
| | | | presence of Polycyclic aromatic |
| | | | hydrocarbons PAH |

Appropriate engineering controls

| Engineering Controls | Showers |
|----------------------|----------------------|
| | Eyewash stations |
| | Ventilation systems. |

Individual protection measures, such as personal protective equipment

| Eye/face protection | Wear safety glasses with side shields (or goggles). |
|--------------------------------|---|
| Skin and body protection | Wear protective gloves and protective clothing. Use rubber or plastic gloves. |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| Physical state Appearance Color | liquid No information available black | Odor Odor threshold | unpleasant No information available |
|--|---|------------------------|--|
| Property | <u>Values</u> | Remarks • Method | |
| pH Molting point (freezing point | Does not apply | | |
| Melting point / freezing point | No information available > 149 °C / 300 °F | | |
| Boiling point / boiling range Flash point | | | |
| Evaporation rate | > 93 °C / 200 °F No information available | | |
| Flammability (solid, gas) | No information available | | |
| Flammability Limit in Air | | | |
| Upper flammability limit: | No information available | | |
| Lower flammability limit: | No information available | | |
| Vapor pressure | >50 mm @80 °F | | |
| Vapor density | No information available | | |
| Relative density | 1.17 | | |
| Water solubility | slightly soluble | | |
| Solubility in other solvents | No information available | | |

Other Information

Softening point Molecular weight VOC Content (%) Density Bulk density No information available No information available

No information available No information available 0.2 % No information available No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

Chemical stability

Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing. Conditions to avoid No information available. Incompatible materials None. Hazardous Decomposition Products None.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product Information | No data available |
|---------------------|--|
| Inhalation | No data available. |
| Eye contact | Irritating to eyes. |
| Skin contact | May cause skin irritation and/or dermatitis. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|-------------------|-----------------|
| Epoxy Resin /Bisphenyl A epoxy | = 11400 mg/kg (Rat) | - | - |
| resin | | | |
| 25068-38-6 | | | |
| CARBON BLACK | > 15400 mg/kg (Rat) | > 3 g/kg (Rabbit) | - |
| 1333-86-4 | | | |

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

| Germ cell mutagenicity Carcinogenicity | | No information available. No information available. | | |
|--|------------------|--|---|------|
| Chemical Name | ACGIH | ACGIH IARC NTP OSHA | | OSHA |
| CARBON BLACK 1333-86-4 | A3 | Group 2B | - | Х |
| Reproductive toxicity STOT - single exposure STOT - repeated exposure Aspiration hazard | e No information | No information available. No information available. No information available. No information available. | | |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document $\ .$

ATEmix (oral) 11,515.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Toxic to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|---------------|----------------------|------|-------------------------------|
| CARBON BLACK | - | - | 5600: 24 h Daphnia magna mg/L |
| 1333-86-4 | | | ÉC50 |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

| Waste treatment methods | |
|-------------------------|---|
| Disposal of wastes | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| Contaminated packaging | Do not reuse container. |

14. TRANSPORT INFORMATION

| <u>DOT</u> UN/ID no. | Not regulated None |
|--------------------------|-----------------------|
| Proper shipping name | Not regulated |
| Hazard Class | None |
| Subsidiary class | None |
| Packing Group | None |
| Reportable Quantity (RQ) | None |
| Special Provisions | None |

| IATA UN/ID no. Proper shipping name Hazard Class Subsidiary hazard class Packing Group Special Provisions | Not regulated None Not regulated None None None None |
|---|--|
| IMDG | Not regulated |
| UN/ID no. | None |
| Proper shipping name | Not regulated |
| Hazard Class | None |
| Subsidiary hazard class | None |
| Packing Group | None |
| Special Provisions | None |
| RID | Not regulated |
| UN/ID no. | None |
| Proper shipping name | Not regulated |
| Hazard Class | None |
| Packing Group | None |
| Special Provisions | None |
| ADR | Not regulated |
| UN/ID no. | None |
| Proper shipping name | Not regulated |
| Hazard Class | None |
| Packing Group | None |
| Special Provisions | None |
| | |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

All ingredients are on the inventory or are exempt from listing.

Legend:

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

| Acute health hazard | No |
|--------------------------------|--------|
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure haz | ard No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

| Chemical Name | California Proposition 65 |
|--------------------------|---------------------------|
| CARBON BLACK - 1333-86-4 | Carcinogen |

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| CARBON BLACK | X | Х | Х |
| 1333-86-4 | | | |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| <u>NFPA</u> | Health hazards 0 | Flammability 0 | Instability 0 | Physical and Chemical Properties - |
|---------------------------|-----------------------|----------------|--------------------|---------------------------------------|
| HMIS | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection X |
| Prepared By Issue Date | SDS coor 08-Jun-20 | | | |

22-Sep-2015

Issue Date Revision Date Revision Note No information available Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet



SAFETY DATA SHEET

Issue Date 08-Jun-2015

Revision Date 01-Oct-2015

Version 1

| 1. IDENTIFICATION | | |
|------------------------------------|-------------------------------|--|
| | | |
| Product identifier | | |
| Product Name | Tuffbond 318B | |
| Other means of identification | | |
| Product Code | MS-318B | |
| UN/ID no. | None | |
| Synonyms | None | |
| Recommended use of the chem | ical and restrictions on use_ | |
| Recommended Use | Hardener. | |
| Uses advised against | None known | |
| Details of the supplier of the saf | ety data sheet_ | |
| Manufacturer Address | | |
| Hernon Manufacturing Inc. | | |
| 121 Tech Drive | | |
| Sanford, FL 32771 | | |
| 800-527-0004 | | |
| Emergency telephone number | | |
| Company Phone Number | 407-322-4000 | |
| Emergency Telephone | Chemtel 800-255-3924 | |

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

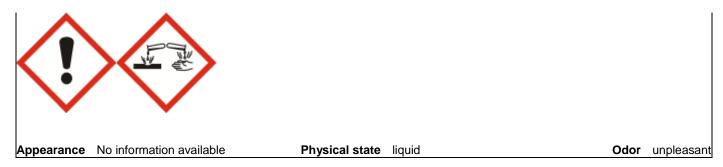
| Acute toxicity - Oral | Category 4 |
|-----------------------------------|---------------------------|
| Acute toxicity - Dermal | Category 4 |
| Skin corrosion/irritation | Category 1 Sub-category B |
| Serious eye damage/eye irritation | Category 1 |
| Skin sensitization | Category 1 |
| Category 4 | |

Label elements

Emergency Overview

Warning

Hazard statements Harmful if swallowed Harmful in contact with skin Causes severe skin burns and eye damage May cause an allergic skin reaction



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Do not breathe dusts or mists Contaminated work clothing must not be allowed out of the workplace Do not eat, drink or smoke when using this product Keep away from flames and hot surfaces. - No smoking

Precautionary Statements - Response

Call a POISON CENTER or doctor/physician if you feel unwell IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF INHALED: Remove person to fresh air and keep comfortable for breathing IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell Rinse mouth Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

| Chemical Name | CAS No. | Weight-% | Trade Secret |
|-------------------------|-------------|----------|--------------|
| Substituted Aminophenol | Proprietary | 80-100 | * |
| + - | | | |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

| Skin contact | Wash with soap and water. Flush skin with water for several minutes. Remove contaminated clothing and shoes. If irritation develops, seek medical attention. Wash clothing before reuse. |
|--|--|
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention immediately. |
| Ingestion | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a POISON CENTER or doctor/physician if you feel unwell. |
| Most important symptoms and effe | cts, both acute and delayed |
| Symptoms | No information available. |
| Indication of any immediate medical attention and special treatment needed | |
| | |

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use CO2, dry chemical, or foam.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products May generate ammonia gas and toxic nitrogen oxide gases. Obnoxious and toxic fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

Explosion data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. |
|-----------------------------------|--|
| Environmental precautions | |
| Environmental precautions | Do not allow into any sewer, on the ground or into any body of water. Collect spillage. See Section 12 for additional ecological information. |
| Methods and material for containm | ent and cleaning up |
| Methods for containment | Prevent further leakage or spillage if safe to do so. |
| Methods for cleaning up | Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. Immediately contact emergency personnel. Keep unnecessary personnel away. Avoid contact with material. |

| | 7. HANDLING AND STORAGE | |
|---|---|--|
| Precautions for safe handling | | |
| Advice on safe handling | Avoid contact with skin, eyes or clothing. Avoid breathing vapors or mists. Wash thoroughly after handling. Ensure adequate ventilation, especially in confined areas. | |
| Conditions for safe storage, includ | ing any incompatibilities | |
| Storage Conditions | Keep at temperatures between 46° and 82 °F. | |
| Incompatible materials | Sodium hypochlorite. Acetic acid. Peroxides. | |
| 8. EX | POSURE CONTROLS/PERSONAL PROTECTION | |
| Control parameters | | |
| Exposure Guidelines | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. | |
| Appropriate engineering controls | | |
| Engineering Controls | Showers Eyewash stations Ventilation systems. | |
| Individual protection measures, such as personal protective equipment | | |
| Eye/face protection | Wear safety glasses with side shields (or goggles). | |
| Skin and body protection | Wear protective gloves and protective clothing. Use rubber or plastic gloves. | |
| Respiratory protection | If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations. | |
| General Hygiene Considerations | Handle in accordance with good industrial hygiene and safety practice. | |
| 9. PHYSICAL AND CHEMICAL PROPERTIES | | |

Information on basic physical and chemical properties

| Physical state Appearance Color | liquid No information available amber yellow | Odor Odor threshold | unpleasant No information available |
|---|---|-------------------------|--|
| Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability limit: Lower flammability limit: Vapor pressure Vapor density | ValuesDoes not applyNo information available> 149 °C / 300 °F> 93 °C / 200 °FNo information availableNo information availableNo information availableNo information availableNo information availableNo information available< 1.00 mm Hg at 21 °C0.97 g/cm3 at 70 °F | <u>Remarks • Method</u> | |

Relative density Water solubility Solubility in other solvents Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties

Other Information

Softening point Molecular weight VOC Content (%) Density Bulk density 0.97 Soluble in water No information available No information available

No information available No information available No information available No information available No information available

10. STABILITY AND REACTIVITY

Reactivity No data available

<u>Chemical stability</u> Stable under recommended storage conditions. <u>Possibility of Hazardous Reactions</u> None under normal processing. <u>Conditions to avoid</u> Storage near to reactive materials. <u>Incompatible materials</u> Sodium hypochlorite. Acetic acid. Peroxides. <u>Hazardous Decomposition Products</u> Nitric acid. Nitrogen oxides (NOx). Ammonia.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| Product Information | No data available |
|---------------------|--|
| Inhalation | No data available. |
| Eye contact | Irritating to eyes. |
| Skin contact | May cause skin irritation and/or dermatitis. |
| Ingestion | No data available. |

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|-------------------------|--------------------|----------------------|-----------------|
| Substituted Aminophenol | = 2140 mg/kg (Rat) | = 880 µL/kg (Rabbit) | - |
| | | | |

Information on toxicological effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

| Germ cell mutagenicity | No information available. |
|--------------------------|---------------------------|
| Carcinogenicity | No information available. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document

| ATEmix | (oral) |
|--------|----------|
| ATEmix | (dermal) |

500.00 mg/kg 1,100.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|-------------------------|-------------------------------|-------------------------------------|-----------------------------|
| Substituted Aminophenol | 495: 72 h Pseudokirchneriella | 1950 - 2460: 96 h Pimephales | 32: 48 h Daphnia magna mg/L |
| | subcapitata mg/L EC50 | promelas mg/L LC50 flow-through | EC50 |
| | | 1000: 96 h Poecilia reticulata mg/L | |
| | | LC50 semi-static 100: 96 h | |
| | | Oncorhynchus mykiss mg/L LC50 | |
| | | semi-static | |

Persistence and degradability

No information available.

Bioaccumulation

No information available.

| Chemical Name | Partition coefficient |
|-------------------------|-----------------------|
| Substituted Aminophenol | -1.48 |

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

| Disposal of wastes | Disposal should be in accordance with applicable regional, national and local laws and |
|--------------------|--|
| | regulations. |

Contaminated packaging Do not reuse container.

14. TRANSPORT INFORMATION

| Not regulated |
|---------------|
| None |
| Not regulated |
| None |
| None |
| None |
| |

| Reportable Quantity (RQ) Special Provisions | None None |
|--|---|
| IATA UN/ID no. Hazard Class Subsidiary hazard class Packing Group ERG Code Special Provisions | Not regulated None None None None None |
| IMDG UN/ID no. Hazard Class Subsidiary hazard class Packing Group EmS-No. Special Provisions | Not regulated None None None None None |
| <u>RID</u> UN/ID no. Hazard Class Packing Group Classification code Special Provisions | Not regulated None None None None None |
| <u>ADR</u> UN/ID no. Hazard Class Packing Group Classification code Tunnel restriction code Special Provisions | Not regulated None None None None None |

15. REGULATORY INFORMATION

| International Inventories | |
|---------------------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

All ingredients are on the inventory or are exempt from listing.

Legend:

 TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

 ENCS - Japan Existing and New Chemical Substances

 IECSC - China Inventory of Existing Chemical Substances

 KECL - Korean Existing and Evaluated Chemical Substances

 PICCS - Philippines Inventory of Chemicals and Chemical Substances

 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Acute health hazard | No |
|-----------------------------------|----|
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|-------------------------|------------|---------------|--------------|
| Substituted Aminophenol | Х | X | Х |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| <u>NFPA</u> | Health hazards 0 | Flammability 0 | Instability 0 | Physical and Chemical Properties - |
|-------------|------------------|----------------|--------------------|---------------------------------------|
| HMIS | Health hazards 0 | Flammability 0 | Physical hazards 0 | Personal protection X |

SDS coordinator

08-Jun-2015

01-Oct-2015

Prepared By Issue Date Revision Date Revision Note No information available Disclaimer

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End of Safety Data Sheet