



# SAFETY DATA SHEET

Surrounding You with Exceptional Protection

Issue Date 02-Dec-2017

Revision Date 31-Aug-2021

Version 3

## 1. IDENTIFICATION

### Product identifier

**Product Name** EC-55MT S / EC-5521MT S Hardener

### Other means of identification

**Product Code** 922BC

**UN/ID no** UN3066

**Synonyms** None

### Recommended use of the chemical and restrictions on use

**Recommended Use** Industrial Coatings

**Uses advised against** No information available

### Details of the supplier of the safety data sheet

#### **Manufacturer Address**

BLOME INTERNATIONAL

1450 Hoff Industrial Drive

O'Fallon, MO 63366

#### **Emergency telephone number**

**Company Phone Number** 636-379-9119

**Emergency Telephone** CHEMTREC: 800-424-9300

CHEMTREC: 703-527-3887

CANUTEC: 613-966-6666

## 2. HAZARDS IDENTIFICATION

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                     |                           |
|-------------------------------------|---------------------------|
| Acute toxicity - Oral               | Category 4                |
| Acute toxicity - Dermal             | Category 4                |
| Acute toxicity - Inhalation (Gases) | Category 4                |
| Skin corrosion/irritation           | Category 1 Sub-category C |
| Serious eye damage/eye irritation   | Category 1                |
| Skin sensitization                  | Category 1                |
| Reproductive toxicity               | Category 2                |

### Label elements

#### **Danger**

#### **Emergency Overview**

#### **Hazard statements**

Harmful if swallowed

Harmful in contact with skin

Harmful if inhaled

Causes severe skin burns and eye damage

Suspected of damaging fertility or the unborn child

May cause an allergic skin reaction

**Appearance** viscous**Physical state** liquid**Odor** Amine**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Wear protective gloves/protective clothing/eye protection/face protection  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

**Precautionary Statements - Response**

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 or doctor/physician  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 If skin irritation or rash occurs: Get medical advice/attention  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Rinse mouth  
 Do NOT induce vomiting

**Precautionary Statements - Storage**

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**

Toxic to aquatic life with long lasting effects.

**Unknown acute toxicity**

0% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance**

Not applicable

**Mixture**

| Chemical Name        | CAS No    | Weight-% |
|----------------------|-----------|----------|
| Isophorone diamine * | 2855-13-2 | 10 - 30  |

|                            |            |         |
|----------------------------|------------|---------|
| 4-tert-Butylphenol *       | 98-54-4    | 10 - 30 |
| Benzyl alcohol *           | 100-51-6   | 10 - 30 |
| 1,3-Benzenedimethanamine * | 1477-55-0  | 10 - 30 |
| Nonylphenols *             | 25154-52-3 | 1 - 5   |

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

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |   |
|---|---|
| <b>General advice</b>                     | In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). If symptoms persist, call a physician.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.  |
| <b>Skin contact</b>                       | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation persists, call a physician.   |
| <b>Inhalation</b>                         | Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | Call a physician or poison control center immediately. Rinse mouth. Drink plenty of water. Do not induce vomiting without medical advice.   |
| <b>Self-protection of the first aider</b> | Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |

##### Most important symptoms and effects, both acute and delayed

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | Causes skin and eye burns. May result in permanent damage including blindness. May cause allergic skin reaction. Coughing and/ or wheezing. |
|-----------------|---|

##### Indication of any immediate medical attention and special treatment needed

|                           |   |
|---------------------------|---|
| <b>Note to physicians</b> | Keep victim warm and quiet. Effects of exposure (inhalation, ingestion or skin contact) to substance may be delayed. Treat symptomatically. |
|---------------------------|---|

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk.

**Unsuitable extinguishing media** Do not use a solid water stream as it may scatter and spread fire.

##### Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Runoff may pollute waterways.

##### 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** Remove all sources of ignition. Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

### Environmental precautions

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible materials** Strong oxidizing agents. Strong acids. Strong bases.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### Exposure Guidelines

| Chemical Name                         | ACGIH TLV                            | OSHA PEL | NIOSH IDLH                     |
|---------------------------------------|--------------------------------------|----------|--------------------------------|
| 1,3-Benzenedimethanamine<br>1477-55-0 | S*<br>Ceiling: 0.1 mg/m <sup>3</sup> | -        | Ceiling: 0.1 mg/m <sup>3</sup> |

NIOSH IDLH *Immediately Dangerous to Life or Health*

### Appropriate engineering controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear protective gloves and protective clothing.

**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

|                                       |                          |                                  |                          |
|---------------------------------------|--------------------------|----------------------------------|--------------------------|
| <b>Physical state</b>                 | liquid                   | <b>Odor</b>                      | Amine                    |
| <b>Appearance</b>                     | viscous                  | <b>Odor threshold</b>            | No information available |
| <b>Color</b>                          | amber                    |                                  |                          |
| <b>Property</b>                       | <b>Values</b>            | <b>Remarks • Method</b>          |                          |
| <b>pH</b>                             | No information available |                                  |                          |
| <b>Melting point / freezing point</b> | No information available |                                  |                          |
| <b>Boiling point / boiling range</b>  | > 120 °C / 248 °F        |                                  |                          |
| <b>Flash point</b>                    | > 100 °C / 212 °F        | Pensky-Martens Closed Cup (PMCC) |                          |
| <b>Evaporation rate</b>               | No information available |                                  |                          |
| <b>Flammability (solid, gas)</b>      | No information available |                                  |                          |
| <b>Flammability Limit in Air</b>      |                          |                                  |                          |
| <b>Upper flammability limit:</b>      | No information available |                                  |                          |
| <b>Lower flammability limit:</b>      | No information available |                                  |                          |
| <b>Vapor pressure</b>                 | No information available |                                  |                          |
| <b>Vapor density</b>                  | No information available |                                  |                          |
| <b>Relative density</b>               | 0.96                     |                                  |                          |
| <b>Water solubility</b>               | dispersible              |                                  |                          |
| <b>Solubility in other solvents</b>   | No information available |                                  |                          |
| <b>Partition coefficient</b>          | No information available |                                  |                          |
| <b>Autoignition temperature</b>       | No information available |                                  |                          |
| <b>Decomposition temperature</b>      | No information available |                                  |                          |
| <b>Kinematic viscosity</b>            | No information available |                                  |                          |
| <b>Dynamic viscosity</b>              | No information available |                                  |                          |
| <b>Explosive properties</b>           | Not an explosive         |                                  |                          |
| <b>Oxidizing properties</b>           | Not applicable           |                                  |                          |

### Other Information

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | 0 g/L                    |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## 10. STABILITY AND REACTIVITY

### Reactivity

No data available

### Chemical stability

Stable under recommended storage conditions.

### **Possibility of Hazardous Reactions**

Hazardous polymerization does not occur.

### **Conditions to avoid**

Elevated Temperature. Incompatible materials.

### **Incompatible materials**

Strong oxidizing agents. Strong acids. Strong bases.

### **Hazardous Decomposition Products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

## 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure**Product Information**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | May cause irritation.  |
| <b>Eye contact</b>  | Corrosive to the eyes and may cause severe damage including blindness.                                     |
| <b>Skin contact</b> | May cause burns. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. |
| <b>Ingestion</b>    | Can burn mouth, throat, and stomach.   |

| Chemical Name                         | Oral LD50            | Dermal LD50             | Inhalation LC50        |
|---------------------------------------|----------------------|-------------------------|------------------------|
| Isophorone diamine<br>2855-13-2       | = 1030 mg/kg ( Rat ) | -                       | -                      |
| 4-tert-Butylphenol<br>98-54-4         | = 4000 mg/kg ( Rat ) | = 2318 mg/kg ( Rabbit ) | -                      |
| Benzyl alcohol<br>100-51-6            | = 1230 mg/kg ( Rat ) | = 2 g/kg ( Rabbit )     | = 8.8 mg/L ( Rat ) 4 h |
| 1,3-Benzenedimethanamine<br>1477-55-0 | = 660 mg/kg ( Rat )  | = 2 g/kg ( Rabbit )     | = 700 ppm ( Rat ) 1 h  |
| Nonylphenols<br>25154-52-3            | = 580 mg/kg ( Rat )  | = 2031 mg/kg ( Rabbit ) | -                      |

Information on toxicological effects

|                 |   |
|-----------------|---|
| <b>Symptoms</b> | May cause an allergic skin reaction. Causes skin burns. May cause redness and tearing of the eyes. May result in permanent damage including blindness. Coughing and/ or wheezing. |
|-----------------|---|

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

|                                 |   |
|---------------------------------|---|
| <b>Sensitization</b>            | May cause sensitization in susceptible persons.                   |
| <b>Germ cell mutagenicity</b>   | Based on available data, the classification criteria are not met. |
| <b>Carcinogenicity</b>          | Based on available data, the classification criteria are not met. |
| <b>Reproductive toxicity</b>    | Contains a known or suspected reproductive toxin.                 |
| <b>STOT - single exposure</b>   | Target Organs. Respiratory system. Eyes. Skin.                    |
| <b>STOT - repeated exposure</b> | Based on available data, the classification criteria are not met. |
| <b>Chronic toxicity</b>         | May cause adverse liver effects.                                  |
| <b>Target Organ Effects</b>     | Eyes, Respiratory system, Skin, kidney, liver.                    |
| <b>Aspiration hazard</b>        | Based on available data, the classification criteria are not met. |

Numerical measures of toxicity - Product Information

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

|                                      |                |
|--------------------------------------|----------------|
| <b>ATEmix (oral)</b>                 | 1,130.00 mg/kg |
| <b>ATEmix (dermal)</b>               | 1,852.00 mg/kg |
| <b>ATEmix (inhalation-gas)</b>       | 3,043.00 mg/l  |
| <b>ATEmix (inhalation-dust/mist)</b> | 6.50 mg/l      |
| <b>ATEmix (inhalation-vapor)</b>     | 2,333.00 mg/l  |

**12. ECOLOGICAL INFORMATION**Ecotoxicity

Toxic to aquatic life with long lasting effects

| Chemical Name                   | Algae/aquatic plants                            | Fish  | Crustacea  |
|---------------------------------|---|---|--|
| Isophorone diamine<br>2855-13-2 | 37: 72 h Desmodesmus subspicatus<br>mg/L EC50   | 110: 96 h Leuciscus idus mg/L<br>LC50 semi-static   | 14.6 - 21.5: 48 h Daphnia magna<br>mg/L EC50 semi-static 42: 24 h<br>Daphnia magna mg/L EC50 |
| 4-tert-Butylphenol<br>98-54-4   | 11.2: 72 h Desmodesmus<br>subspicatus mg/L EC50 | 4.71 - 5.62: 96 h Pimephales<br>promelas mg/L LC50 flow-through<br>6.9: 96 h Cyprinus carpio mg/L | 3.9: 48 h Daphnia magna mg/L<br>EC50 3.4 - 4.5: 48 h Daphnia<br>magna mg/L EC50 Static       |

|   |  | LC50 static  |  |
|---|--|--|--|
| Benzyl alcohol<br>100-51-6                  | 35: 3 h Anabaena variabilis mg/L<br>EC50   | 460: 96 h Pimephales promelas<br>mg/L LC50 static 10: 96 h Lepomis<br>macrochirus mg/L LC50 static | 23: 48 h water flea mg/L EC50  |
| Trimethylhexamethylenediamine<br>25620-58-0 | 29.5: 72 h Desmodemus<br>subspicatus mg/L EC50   | 172: 48 h Leuciscus idus mg/L<br>LC50 static   | 31.5: 24 h Daphnia magna mg/L<br>EC50  |
| Nonylphenols<br>25154-52-3                  | 0.41: 96 h Pseudokirchneriella<br>subcapitata mg/L EC50 1.3: 72 h<br>Desmodemus subspicatus mg/L<br>EC50 | 0.135: 96 h Pimephales promelas<br>mg/L LC50 flow-through  | 0.14: 48 h Daphnia magna mg/L<br>EC50 0.17 - 0.21: 48 h Daphnia<br>magna mg/L EC50 Static 0.0874 -<br>0.124: 48 h Daphnia magna mg/L<br>EC50 semi-static |

**Persistence and degradability**

No information available.

**Bioaccumulation**

| Chemical Name                   | Partition coefficient |
|---------------------------------|-----------------------|
| Isophorone diamine<br>2855-13-2 | 0.79                  |
| 4-tert-Butylphenol<br>98-54-4   | 2.44                  |
| Benzyl alcohol<br>100-51-6      | 1.1                   |
| Nonylphenols<br>25154-52-3      | 3.28                  |

**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.

**US EPA Waste Number**

D002

**14. TRANSPORT INFORMATION****DOT**

UN/ID no UN3066  
 Proper shipping name Paint  
 Hazard Class 8  
 Packing Group III  
 Special Provisions B52, IB3, T4, TP1, TP29  
 Description UN3066, Paint, 8, III  
 Emergency Response Guide Number 153

**TDG**

UN/ID no UN3066  
 Proper shipping name Paint  
 Hazard Class 8  
 Packing Group III  
 Description UN3066, Paint, 8, III

**IATA**

|                             |                       |
|-----------------------------|-----------------------|
| <b>UN/ID no</b>             | UN3066                |
| <b>Proper shipping name</b> | Paint                 |
| <b>Hazard Class</b>         | 8                     |
| <b>Packing Group</b>        | III                   |
| <b>ERG Code</b>             | 8L                    |
| <b>Special Provisions</b>   | A3, A72, A803, A192   |
| <b>Description</b>          | UN3066, Paint, 8, III |

**IMDG**

|                             |                       |
|-----------------------------|-----------------------|
| <b>UN/ID no</b>             | UN3066                |
| <b>Proper shipping name</b> | Paint                 |
| <b>Hazard Class</b>         | 8                     |
| <b>Packing Group</b>        | III                   |
| <b>EmS-No</b>               | F-A, S-B              |
| <b>Special Provisions</b>   | 163, 223              |
| <b>Description</b>          | UN3066, Paint, 8, III |

|                                   |
|-----------------------------------|
| <b>15. REGULATORY INFORMATION</b> |
|-----------------------------------|

**International Inventories**

|                      |          |
|----------------------|----------|
| <b>TSCA</b>          | Complies |
| <b>DSL/NDSL</b>      | Complies |
| <b>EINECS/ELINCS</b> | Complies |
| <b>IECSC</b>         | Complies |
| <b>KECL</b>          | Complies |
| <b>PICCS</b>         | Complies |
| <b>AICS</b>          | Complies |

**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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical Name             | SARA 313 - Threshold Values % |
|---------------------------|-------------------------------|
| Nonylphenols - 25154-52-3 | 1.0                           |

**SARA 311/312 Hazard Categories**

|  |     |
|--|-----|
| <b>Acute health hazard</b>               | Yes |
| <b>Chronic Health Hazard</b>             | Yes |
| <b>Fire hazard</b>                       | No  |
| <b>Sudden release of pressure hazard</b> | No  |
| <b>Reactive Hazard</b>                   | 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 |
|---|------------|---------------|--------------|
| Isophorone diamine<br>2855-13-2             | X          | -             | -            |
| Benzyl alcohol<br>100-51-6                  | -          | X             | X            |
| 1,3-Benzenedimethanamine<br>1477-55-0       | X          | X             | X            |
| Trimethylhexamethylenediamine<br>25620-58-0 | X          | -             | -            |
| Nonylphenols<br>25154-52-3                  | -          | X             | X            |

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

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

|                                   |                                  |                |                    |                                    |
|-----------------------------------|----------------------------------|----------------|--------------------|------------------------------------|
| <b>NFPA</b>                       | Health hazards 3                 | Flammability 1 | Instability 0      | Physical and Chemical Properties - |
| <b>HMIS</b>                       | Health hazards 3*                | Flammability 1 | Physical hazards 0 | Personal protection X              |
| <i>Chronic Hazard Star Legend</i> | <i>* = Chronic Health Hazard</i> |                |                    |                                    |

Issue Date 02-Dec-2017

Revision Date 31-Aug-2021

**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