**BOSTER BIOLOGICAL TECHNOLOGY**
3942 B Valley Ave, Pleasanton, CA 94566

Phone: 888-466-3604 Fax: 925-215-2184 Email: boster@bosterbio.com Web: www.bosterbio.com

# Material Safety Data Sheet

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product Identifiers

| | |
|---|---|
| Catalog Number | EK0480 |
| Product Name | Human OPG (TNFRSF11B) / Osteoprotegerin ELISA Kit PicoKine® |

**Components:**
Anti- Human TNFRSF11B Pre-coated 96-well strip microplate
Human TNFRSF11B Standard (contains Proclin 300)
Human TNFRSF11B Biotinylated antibody(100x) (contains Proclin 300)
Avidin-Biotin-Peroxidase Complex (ABC)(100x) (contains Proclin 300)
Sample Diluent (contains Proclin 300)
Antibody Diluent (contains Proclin 300)
Avidin-Biotin-Peroxidase Diluent (contains Proclin 300)
Color Developing Reagent(TMB) (contains 3,3’,5,5’-Tetramethylbenzidine and hydrogen peroxide)
Stop Solution (contains sulfuric acid)
Wash Buffer(25X)
Plate Sealers

### 1.2 Application of the substance or mixture

For research use only.

### 1.3 Company Identification

Boster Biological Technology Co., Ltd.
3942 B Valley Ave, Pleasanton, CA, 94566, USA.
Fone: (888) 466-3604 Fax: (925) 215-2184

## 2.HAZARDS IDENTIFICATION

See additional safety data sheets

## 1. DENTIFICATION OF THE SUBSTANCE/MIXTURE

### 1.1 Product Identifiers

**Product name:** Human TNFRSF11B Standard (contains Proclin 300)
Human TNFRSF11B Biotinylated antibody(100x) (contains Proclin 300)

Avidin-Biotin-Peroxidase Complex (ABC)(100x) (contains Proclin 300)
Sample Diluent (contains Proclin 300)
Antibody Diluent (contains Proclin 300)
Avidin-Biotin-Peroxidase Diluent (contains Proclin 300)

## 2.HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]**

Sensitization, skin - Category 1

### 2.2 Label Element

**Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]**

| | |
|---|---|
| Pictogram(s): |  |

**Signal Word:**WARNING

**Hazard statements:**

H317: May cause an allergic skin reaction.

**Precautionary statements:**

P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P333+313: If skin irritation or rash occurs: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
Other Hazards: None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Description: Proclin 300**

| Component | CAS-No. | Index-No. | Concentration |
|---|---|---|---|
| Mixture of 5-Cloro-2-Methyl-4-Isothiazolin-3-One (26172-55-4) and -Methyl-4-Isothiazolin-3-One (2682-20-4) | 55965-84-9 | 613-167-00-5 | 0.04% |

## 4.FIRST AID MEASURES

| | |
|---|---|
| **Skin contact** | Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician. |
| **Eye contact** | Rinse immediately with plenty of water. Consult |

| | |
|---|---|
| | a physician. |
| **Ingestion** | Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician. |
| **Inhalation** | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **Notes to physician** | Treat symptomatically. |

## 5.FIRE FIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| **Special precautions for fire-fighters** | Self contained breathing apparatus and full protective clothing must we worn in case of fire. |
| **Special hazards arising from the substance or mixture** | In combustion, may emit toxic fumes. |

## 6.ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal precautions** | Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. |
| **Environmental precautions** | Keep away from drains. |
| **Methods and materials for containment and cleaning up** | Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. |

## 7.HANDLING AND STORAGE

| | |
|---|---|
| **Handling** | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use normal measures for preventive fire protection. |
| **Storage** | Store according to product specifications. |

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters:** Contains no substances with occupational exposure limit values.

**Individual protection measures:** Wash hands thoroughly after handling chemical products and before eating, smoking or using the toilet. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing.

| | |
|---|---|
| **Eye/face protection** | Wear approved safety goggles. |
| **Skin/hand protection:** | Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. |
| **Body protection** | Wear suitable protective clothing as protection against splashing or contamination. |
| **Other skin protection** | Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. |
| **Respiratory protection** | In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). |

## 9.PHYSICAL AND CHEMICAL PROPERTIES

**Important Health Safety and Environment Information**

| | |
|---|---|
| **a) Appearance Form:** | Liquid. |
| **b) Odour** | no data available |
| **c) Odour Threshold** | no data available |
| **d) pH** | no data available |
| **e) Melting point/freezing point** | no data available |
| | |

| | |
|---|---|
| **f) Initial boiling point and boiling range** | no data available |
| **g) Flash point** | no data available |
| **h) Evaporation rate** | no data available |
| **i) Flammability (solid, gas)** | no data available |
| **j) Upper/lower flammability or explosive limits** | no data available |
| **k) Vapour pressure** | no data available |
| **l) Vapour density** | no data available |
| **m) Relative density** | no data available |
| **n) Water solubility** | no data available |
| **o) Partition coefficient: noctanol/water** | no data available |
| **p) Auto-ignition temperature** | no data available |
| **q) Decomposition temperature** | no data available |
| **r) Viscosity** | no data available |
| **s) Explosive properties** | no data available |
| **t) Oxidizing properties** | no data available |

**10.STABILITY AND REACTIVITY**

| | |
|---|---|
| **Reactivity** | Stable under recommended transport or storage conditions. |
| **Chemical Stability** | Stable under recommended storage and handling conditions. |
| **Conditions to avoid** | Heat, moisture. |
| | |

| | |
|---|---|
| **Incompatible materials** | Strong acids/alkalis, strong oxidising/reducing agents. |
| **Hazardous decomposition products** | Strong acids/alkalis, strong oxidising/reducing agents. |
| **Hazardous polymerization** | Hazardous polymerization does not occur. |

## 11.TOXICOLOGICAL INFORMATION

**Information on toxicological effects**
**Acute toxicity:** Classified based on available data.
**Skin irritant effect:** Classified based on available data.
**Serious Eye Damage / Irritation:** Classified based on available data
**Respiratory or Skin Sensitization:** Classified based on available data.
**Germ Cell Mutagenicity:** Classified based on available data.
**Carcinogenicity:** Classified based on available data.
**Reproductive Toxicity:** Classified based on available data.
**Specific Target Organ Toxicity - Single Exposure:** Classified based on available data.
**Specific Target Organ Toxicity - Repeated Exposure:** Classified based on available data.
**Symptoms / Routes of Exposure :**
Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.
Ingestion: There may be irritation of the throat.
Skin: There may be mild irritation at the site of contact.
Eyes: There may be irritation and redness.
Delayed / Immediate Effects: No known symptoms.
**Additional Information:** Classified based on available data.

## 12. ECOLOGICAL INFORMATION

**Toxicity:** No data available.
**Persistence and degradability:** No data available.
**Bioaccumulative potential:** No data available.
**Mobility in soil:** No data available.
**Results of PBT and vPvB assessment:** No data available.
**Other adverse effects:** No data available.

## 13.DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Disposal methods** | Transfer to a suitable container and arrange for collection by specialized disposal company in accordance with national, regional, or local legislation. |
| **Contaminated packaging** | Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordance with national, regional, or local legislation. |

## 14.TRANSPORT INFORMATION

| | |
|---|---|

| | |
|---|---|
| **DOT** | Not dangerous goods. |
| **ADR** | Not dangerous goods. |
| **IATA** | Not dangerous goods. |

## 15. REGULATORY INFORMATION

**US Federal and State Regulations**
**SARA 313 Components**
Not applicable.
**SARA 311/312 Hazards**
Not applicable.
**CERCLA Reportable Quantity**
Not applicable.
**California Prop. 65 Components**
Not applicable.

## 16. OTHER INFORMATION

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Boster Corporation cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

## 1. DENTIFICATION OF THE SUBSTANCE/MIXTURE

### 1.1 Product Identifiers

**Product name:**
Color Developing Reagent(TMB) (contains 3,3’,5,5’-Tetramethylbenzidine and hydrogen peroxide)

## 2.HAZARDS IDENTIFICATION

**Emergency Overview:** These products do not contain any substances above any specific or generic concentration limits according to EC directives or respective national laws.
**Classification of the mixture:** These products do not contain any substances above any specific or generic concentration limits according to EC directives or respective national laws.
**Label Elements:** The products do not need to labeled with hazard elements.
**Other Hazards:** None known.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | EC No. | Concentration |
|---|---|---|---|
| 3,3’,5,5’-Tetramethylbenzidine | 54827-17-7 | 259-364-6 | <0.06% |
| Hydrogen peroxide | 7722-84-1 | 231-765-0 | <0.03% |

## 4.FIRST AID MEASURES

| | |
|---|---|
| **Skin contact** | Wash off with soap and plenty of water. Consult a physician. |
| **Eye contact** | Flush eyes with water as a precaution. |
| **Ingestion** | Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| **Inhalation** | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| **Notes to physician** | Treat symptomatically. |

## 5.FIRE FIGHTING MEASURES

| | |
|---|---|
| **Suitable extinguishing media** | Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Ensure adequate ventilation. |
| **Special hazards arising from the substance or mixture** | No data available. |
| **Protective equipment for firefighters** | Wear self-contained breathing apparatus for firefighting if necessary. |

## 6.ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal precautions** | Use standard laboratory practices including proper personal protective equipment. |
| **Environmental precautions** | Prevent further leakage or spillage if safe to do so. Do not let product enter drains. |
| **Methods and materials for containment and cleaning up** | Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. |
| **Reference to other sections** | For disposal see section 13. |

## 7.HANDLING AND STORAGE

| | |
|---|---|
| **Handling** | Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.2. |
| **Storage** | Store according to product specifications. |

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines**

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

**Engineering measures**

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

| | |
|---|---|
| **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. |
| **Hand protection** | Impervious gloves. |
| **Eye protection** | No special protective equipment required. |
| **Skin and body protection** | No special protective equipment required. |

## 9.PHYSICAL AND CHEMICAL PROPERTIES

**Important Health Safety and Environment Information**

| | |
|---|---|
| **a) Appearance Form:** | Clear liquid, colorless to trace blue. |
| **b) Odour** | Minimal odor characteristics. |
| **c) Odour Threshold** | no data available |
| **d) pH** | pH = 3.1 ± 0.5 |
| | |

| | |
|---|---|
| **e) Melting point/freezing point** | no data available |
| **f) Initial boiling point and boiling range** | no data available |
| **g) Flash point** | no data available |
| **h) Evaporation rate** | no data available |
| **i) Flammability (solid, gas)** | no data available |
| **j) Upper/lower flammability or explosive limits** | no data available |
| **k) Vapour pressure** | no data available |
| **l) Vapour density** | no data available |
| **m) Relative density** | no data available |
| **n) Water solubility** | no data available |
| **o) Partition coefficient: noctanol/water** | no data available |
| **p) Auto-ignition temperature** | no data available |
| **q) Decomposition temperature** | no data available |
| **r) Viscosity** | no data available |
| **s) Explosive properties** | no data available |
| **t) Oxidizing properties** | TMB is readily oxidized by oxidizing agents such as common metal cations and trace metals, forming blue or yellow colored products. |

## 10.STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability** | Stable under recommended storage and handling conditions. |
| **Conditions to Avoid** | Prolonged exposure to elevated temperature and |

| | |
|---|---|
| | light may cause blue or yellow color formation, and reduced reactivity. |
| **Materials to Avoid** | Strong oxidizing agents, strong acids. Contact with metals or metal surfaces may cause blue or yellow color formation. |
| **Possibility of hazardous reactions** | Hazardous reaction has not been reported. |
| **Hazardous decomposition products** | High temperature or fire conditions may cause toxic vapor formation, including oxides of carbon, nitrogen, and formation of hydrogen chloride gas. |
| **Hazardous polymerization** | Hazardous polymerization does not occur. |
| **Conditions to avoid** | None under normal processing. |

## 11.TOXICOLOGICAL INFORMATION

**Acute toxicity**
**Toxicity:** Not classified as acutely toxic by oral, dermal, or inhalation routes.
**Ingestion:** No data available.
**Skin Contact:** No data available.
**Eye Contact:** No data available.
**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.
**Carcinogenicity:** No components of this product present at levels greater than or equal to 0.1% are identified as probable, possible, or confirmed human carcinogens by IARC.
**Reproductive Toxicity:** No data available.
**Specific Organ Toxicity:** No data available
**Delayed / Immediate Effects:** No data available.

## 12. ECOLOGICAL INFORMATION

**Aquatic toxicity:** No data available.
**Persistence and degradability:** No data available.
**Bioaccumulative potential:** No data available.
**Mobility in soil:** No data available.
**Other adverse effects:** No data available.

## 13.DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Disposal methods** | Dispose of waste in accordance to applicable national, regional, or local regulations. |
| **Contaminated packaging** | Do not re-use empty containers. |

## 14.TRANSPORT INFORMATION

**Transport class:** Not hazardous for transport.
The goods are not regulated for transport by IATA.

## 15. REGULATORY INFORMATION

### US Federal and State Regulations

**SARA 313 Components**
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 Hazard | No |
| Reactive Hazard | No |

**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).
**California Prop. 65 Components** This product does not contain any Proposition 65 chemicals.

## 16. OTHER INFORMATION

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Boster Corporation cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

## 1. DENTIFICATION OF THE SUBSTANCE/MIXTURE

### 1.1 Product Identifiers

**Product name:** Stop Solution (contains sulfuric acid)

## 2.HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [GHS/CLP] or 29 CFR 1910.1200 [OSHA]**

Skin Corrosion/Irritation - Category 2
Serious eye damage/eye irritation - Category 2A

### 2.2 Label Element Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

| | |
|---|---|
| Pictogram(s): |  |

**Signal Word:**WARNING
**Hazard statements:**
H315: Causes skin irritation.
H319: Causes serious eye irritation.
**Precautionary statements:**
P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+352: IF ON SKIN: Wash with plenty of soap and water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321: Specific treatment (see Section 4).
P332+313: If skin irritation occurs: Get medical advice/attention.
P337+313: If eye irritation persists: Get medical advice/attention.
P362+364: Take off contaminated clothing and wash it before reuse.
**Other Hazards:** None.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

| Chemical Name | CAS-No | EC No. | Concentration | Classification |
|---|---|---|---|---|
| Sulfuric acid | 7664-93-9 | 231-639-5 | 2% | H315 , H319 |

## 4.FIRST AID MEASURES

| | |
|---|---|
| **Skin contact** | Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician. |
| **Eye contact** | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. |
| **Ingestion** | Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician. |
| **Inhalation** | Move to fresh air. |
| **Notes to physician** | Treat symptomatically. |

## 5.FIRE FIGHTING MEASURES

| | |
|---|---|
| **Flammable properties** | Not flammable. |
| **Flash point** | Not determined. |
| **Suitable extinguishing media** | Water spray, alcohol-resistant foam, dry chemical or carbon dioxide. |
| | |

| | |
|---|---|
| **Protective equipment for firefighters** | As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear to prevent contact with skin and eyes. |

## 6.ACCIDENTAL RELEASE MEASURES

| | |
|---|---|
| **Personal precautions** | Use personal protective equipment. Ensure adequate ventilation. |
| **Environmental precautions** | Try to prevent the material from entering drains or water courses. |
| **Methods and materials for containment and cleaning up** | Soak up with inert absorbent material. |
| **Methods for containment** | Prevent further leakage or spillage if safe to do so. |

## 7.HANDLING AND STORAGE

| | |
|---|---|
| **Handling** | Avoid inhalation of vapour or mist. |
| **Storage** | Store in a cool, dry place, isolated from organic materials, nitrates, carbides, chlorates, chlomates and cyanides. |

## 8.EXPOSURE CONTROLS/PERSONAL PROTECTION

**Exposure Guidelines:**
This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

| Chemical Name | CAS-No | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|---|---|---|---|---|
| Sulfuric acid | 7664-93-9 | TWA: 0.2 mg/m3 thoracic fraction | TWA: 1 mg/m3 (vacated) TWA: 1 mg/m3 | IDLH: 15 mg/m3 TWA: 1 mg/m3 |

**Exposure Guidelines:**This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Personal protective equipment**

| | |
|---|---|
| **Respiratory protection** | In case of inadequate ventilation, use a suitable |

| | |
|---|---|
| | respirator. |
| **Hand protection** | Rubber gloves. |
| **Eye protection** | Safety glasses with side-shields. |
| **Skin and body protection** | Lightweight protective clothing |
| **Hygiene measures** | Handle in accordance with good industrial hygiene and safety practice. |

**9.PHYSICAL AND CHEMICAL PROPERTIES**

**Important Health Safety and Environment Information**

| | |
|---|---|
| **a) Physical State** | Liquid. |
| **b)Boiling Point** | no data available |
| **c)Freezing/Melting Point** | no data available |
| **d)Autoignition Temperature** | no data available |
| **e)Flash Point** | no data available |
| **f)Explosion Limits, lower** | no data available |
| **g)Decomposition Temperature** | no data available |
| **h)Solubility in water** | no data available |

**10.STABILITY AND REACTIVITY**

| | |
|---|---|
| **Chemical Stability** | Stable. |
| **Materials to avoid** | Metallic sulfides and metal powers. |
| **Hazardous decomposition products** | Sulfur dioxide,hydrogen sulfide, hydrogen gas. |
| **Polymerization** | No information available. |

## 11.TOXICOLOGICAL INFORMATION

**Acute toxicity**
**Product Information**
Product does not present an acute toxicity hazard based on known or supplied information.

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|---|---|
| Sulfuric acid | 2140 mg/kg ( Rat ) | | 510 mg/m3 ( Rat ) 2 h<br>347 ppm (Rat ) 1 h |

**Principle Routes of Exposure/Potential Health effects**

| | |
|---|---|
| **Eyes** | Causes eye burns. |
| **Skin** | Causes skin irritation. |
| **Inhalation** | May be harmful if inhaled. |
| **Ingestion** | May be harmful if swallowed. |

**Specific effects**

| | |
|---|---|
| **Carcinogenic effects** | This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B). |
| **Mutagenic effects** | No information available. |
| **Reproductive toxicity** | No information available. |
| **Reproductive toxicity** | No information available. |
| **Sensitization** | No information available. |
| **Target Organ Effects** | No information available. |

| Chemical Name | ACGIH | IARC | NTP | OSHA |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| Sulfuric acid | A2 | Group 1 | Known | X |

ACGIH: (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
NTP: (National Toxicity Program)
Known - Known Carcinogen
OSHA: (Occupational Safety & Health Administration)
X - Present

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---|---|---|---|---|
| Sulphuric acid | | 500: 96 h Brachydanio rerio mg/L LC50 static | | 29: 24 h Daphnia magna mg/L EC50 |

## 13.DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Disposal methods** | This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements. |
| **Contaminated packaging** | Do not re-use empty containers. |

This product contains one or more substances that are listed with the State of California as a hazardous waste.

| Chemical Name | California Hazardous Waste Status |
|---|---|
| Sulfuric acid | Toxic Corrosive |

## 14.TRANSPORT INFORMATION

The substance does not belong to explosive substances; does not belong to flammable substances;

does not belong to oxidizing substances; does not belong to toxic substances; does not belong to radioactive substances; does not belong to corrosive substances and without other danger.

| | |
|---|---|
| **Proper shipping name** | SULFURIC ACID |
| **Hazard Class** | 8 |
| **Subsidiary Class** | No information available. |

## 15. REGULATORY INFORMATION

**SARA 313 Components**

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:

| Sulphuric acid | CAS-No. | Weight | SARA 313 - Threshold Values |
|---|---|---|---|
| | 7664-93-9 | 2% | 1.0 |

**SARA 311/312 Hazard Categories**

| | |
|---|---|
| **Acute Health Hazard** | No |
| **Chronic Health Hazard** | No |
| **Fire Hazard** | No |
| **Reactive Hazard** | No |
| **Sudden Release of Pressure Hazard** | No |

**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).

| Sulphuric acid Substances | CAS-No. | CWA – Reportable | Quantities | Quantities |
|---|---|---|---|---|
| | | | | |

| | | | | |
|---|---|---|---|---|
| | 7664-93-9 | 1000 lb | | X |

**California Prop. 65 Components** This product contains the following Proposition 65 chemicals.

| Sulphuric acid | CAS-No. | Weight | Category |
|---|---|---|---|
| | 7664-93-9 | 2% | Carcinogen |

## 16. OTHER INFORMATION

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since Boster Corporation cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.