



SAFETY DATA SHEET

MAY BE USED TO COMPLY WITH OSHA'S HAZARD COMMUNICATION STANDARD, 29 CFR 1910.1200 AND SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 PUBLIC LAW 99-499. STANDARD SHOULD BE CONSULTED FOR SPECIFIC REQUIREMENTS.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

NAME OF PRODUCT: EUTECROD 1030FC
SYNONYMS: Eutectic 1030 FC
PRODUCT CODES: X1030FC-16-2.5K, X1030FC-16-454G, X1030XFC-16-908G, X1030FC-24-2.5K, X1030FC-24-454G, X1030FC-24-908G

**MANUFACTURER/
SUPPLIER:** EUTECTIC CORPORATION
N94W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA

TELEPHONE NUMBER: (262) 532-4677
FAX NUMBER: (262) 255-5542
EUTECTIC WEBSITE: www.eutectic.com

PRODUCT CLASSIFICATION: Brazing Alloy

SECTION 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Odorless coated wire. Chemically stable and inert. Does not pose a fire hazard. Flames used for brazing can ignite combustibles. Refer to American National Standard Z49.1 for fire prevention during welding.

HEALTH DANGER: Toxic. Danger of serious damage to health by exposure through inhalation.

ROUTES OF ENTRY: Primary route of entry is the respiratory system when used. Other possible routes are eyes, ingestion, and/or skin contact.

POTENTIAL HEALTH EFFECTS:

EYES: Inert foreign body hazard only.
SKIN: Prolonged contact may result in rashes/irritations due to drying of the skin and/or mechanical abrasion related to skin-to-clothing contact or skin-to-skin contact. May cause allergic skin reaction.
INGESTION: No adverse health effects known by this route during proper industrial handling.
INHALATION: Exposure to fumes may be deadly.

ACUTE HEALTH HAZARDS: see Section 11

CHRONIC HEALTH HAZARDS: see Section 11

WARNING: This product contains or produces a chemical known to the State of California to cause birth defects (or other reproductive harm) and cancer. (California Health & Safety Code 25249.5 et seq.).

WARNING - CONTAINS CADMIUM : do not breathe welding fumes and gases; they may be dangerous to your health. Always use adequate ventilation and use appropriate personal protection equipment. Exposure to fumes may be deadly.

CARCINOGENICITY

CADMIUM - Cadmium is listed as being carcinogenic to humans on **IARC** and **NTP** lists, and is listed by **NIOSH** as being a potential occupational carcinogen (with no further categorization).

WELDING FUMES (not otherwise specified) are considered to be carcinogenic defined with no further categorization by **NIOSH** and **IARC**.

DANGER:

Very toxic, Toxic, Harmful, Dangerous for the environment

R-phrases:

May cause cancer.

May impair fertility.

May cause harm to the unborn child.

Harmful in contact with skin and if swallowed.

Very toxic by inhalation.

Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Possible risks of irreversible effects.

Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12 hours after (headache, dizziness, dryness, cough, nausea and fever).

May cause irritation by prolonged inhalation of brazing/welding fumes.

Hazard categories:

Acute toxicity: Acute Tox. 4

Acute toxicity: Acute Tox. 1

Germ cell mutagenicity: Muta. 2

Carcinogenicity: Carc. 1B

Reproductive toxicity: Repr. 1B

Specific target organ toxicity - repeated exposure: STOT RE 1

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Harmful if swallowed.

Fatal if inhaled.

Suspected of causing genetic defects.

May cause cancer.

GHS classification

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Reproductive toxicity: Repr. 1B

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

May damage fertility. May damage the unborn child.

Pictograms: GHS06 - GHS08 – GHS09



Hazardous components

Cadmium (non-pyrophoric)

Boric acid

Hazard statements

- H302 Harmful if swallowed.
- H330 Fatal if inhaled.
- H341 Suspected of causing genetic defects.
- H350 May cause cancer.
- H360FD May damage fertility. May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

- P285 In case of inadequate ventilation wear respiratory protection.
- P314 Get medical advice/attention if you feel unwell.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapours/spray.
- P501 Dispose of contents/container to waste treatment facility in accordance with local and national regulations.

Additional advice on labeling

As an article the product does not need to be labeled in accordance with EC-directives or respective national laws. Although this product does not require a hazard warning label, we recommend that the safety advice should be observed. Metals in massive form, alloys, mixtures containing polymers and mixtures containing elastomers do not require a label according to this Annex (Annex I GHS), if they do not present a hazard to human health by inhalation, ingestion or contact with skin or to the aquatic environment in the form in which they are placed on the market, although classified as hazardous in accordance with the criteria of this Annex. Instead, the supplier shall provide the information to downstream users or distributors by means of the SDS.

SECTION 2 NOTES: Before using this product, contact your doctor to determine if exposure to product or use of this product will aggravate your medical conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

IMPORTANT: This section covers the materials from which these products are manufactured. Any of the chemicals or compounds subject to reporting under Title III, in Section 313, of the Superfund Amendments and Reauthorization Act (SARA) are marked by the symbol #.

Exposure Limit (mg/m³)

INGREDIENTS	CAS NUMBER	OSHA PEL	ACGIH-TLV	Percent Ingredients (by weight)
Copper #	7440-50-8	0.1 (as fume)	0.2 (as fume)	15 – 40
Silver #	7440-22-4	0.01	0.1	15 – 40
Cadmium #	7440-43-9	0.005	0.002	10 – 30
Zinc #	7440-66-0	5	Not listed	10 – 30
Boric Acid	10043-35-3	Not listed	Not listed	7 – 13
Potassium Bifluoride	7789-29-9	2.5 (as F)	2.5 (as F)	5 – 10
Potassium Fluoride	7789-23-3	2.5 (as F)	2.5 (as F)	3 – 7
Potassium Pentaborate Tetrahydrate	12229-13-9	Not listed	Not listed	1 – 5
Sodium Ammonium Phosphate Tetrahydrate	7783-13-3	Not listed	Not listed	1 – 5
Potassium Chloride	7447-40-7	Not listed	Not listed	1 – 5
Lithium Fluoride	7789-24-4	2.5 (as F)	2.5 (as F)	1 – 5
Sodium Fluoride	7681-49-4	2.5 (as F)	2.5 (as F)	1 – 5
Ammonium Fluoborate	13826-83-0	2.5 (as F)	2.5 (as F)	0.2 – 1.5

CAS / EINECS NUMBER / HAZARD CLASSIFICATION FOR ABOVE INGREDIENTS

INGREDIENTS	CAS NUMBER	EINECS NUMBER	Hazard Classification per ECD 67/548/EEC
Copper #	7440-50-8	231-159-6	No
Silver #	7440-22-4	231-131-3	No
Cadmium #	7440-43-9	231-152-8	R45, 26, 48/23/25, 62, 63, 68, 50/53
Zinc #	7440-66-6	231-175-3	No (Zn in solid article form, not powder form)
Boric Acid	10043-35-3	233-139-2	Boric acid C \geq 5,5 % Repr.Cat. 2; R60-61
Potassium Bifluoride	7789-29-9	232-156-2	1 % \leq C < 10 % Xn; R22
Potassium Fluoride	7789-23-3	232-151-5	T; R23/24/25
Potassium Pentaborate Tetrahydrate	12229-13-9	None	Not listed
Sodium Ammonium Phosphate Tetrahydrate	7783-13-3	None	Not listed
Potassium Chloride	7447-40-7	231-211-8	No
Lithium Fluoride	7789-24-4	232-152-0	No
Sodium Fluoride	7681-49-4	231-667-8	T; R25 - Xi; R36/38 - R32
Ammonium Fluoborate	13826-83-0	237-531-4	No

SECTION 3 NOTES: Exposure limits are subject to change. Contact ACGIH and OSHA for current values. See Section 16 for European Council Directive 67/548/EEC R-phrases

SECTION 4: FIRST AID MEASURES

EMERGENCY & FIRST AID PROCEDURES: Call for medical aid and inform them of the ingredients from Section 2. Employ first aid techniques recommended by The American Red Cross.

EYES: Flush with a large amount of fresh water for at least 15 minutes. Get medical attention.

SKIN: Wash affected area with soap and water to remove dust or particles. If rash develops, see a physician. Get medical attention for irritations that persist.

INGESTION: Call a physician at once or your poison control center and advise of chemical composition. Seek medical attention immediately.

INHALATION: Terminate exposure and remove to fresh air. Call a physician immediately and advise of chemical composition. If breathing is difficult administer oxygen. If breathing has stopped, begin artificial respiration and obtain medical assistance immediately.

GENERAL: Move to fresh air and call for medical aid.

SECTION 4 NOTES: When the brazing rod is consumed, fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Fume and decomposition products, not the ingredients in the rod, are important. Decomposition products include those originating from the volatilization, reaction, or oxidation of materials in Section 3, plus those from the base metal, etc., as noted above. These components are virtually always present as complex oxides and not as metals (Characterization of Arc Welding Fume: American Welding Society). Reasonably expected fume constituents of the fume could include complex oxides of highly toxic CdO.

SECTION 5: FIRE FIGHTING MEASURES

Non-Flammable These products as shipped are non-hazardous, nonflammable, non-explosive, and non-reactive. In case of fire, Use NIOSH/MSHA self contained breathing apparatus. Thermal decomposition may produce heavy brown smoke and CdO fumes - *highly toxic*.

NFPA HAZARD CLASSIFICATION:

Health: 2 Flammability: 0 Reactivity: 0

Other: In case of fire, Use NIOSH/MSHA self contained breathing apparatus. Thermal decomposition may produce heavy brown smoke and CdO fumes - *highly toxic*.

HMIS HAZARD CLASSIFICATION:

Health: 2 Flammability: 0 Reactivity: 0

Protection: In case of fire, Use NIOSH/MSHA self contained breathing apparatus. Thermal decomposition may produce heavy brown smoke and CdO fumes - *highly toxic*.

EXTINGUISHING MEDIA: water, dry chemical extinguisher, CO2

SPECIAL FIRE FIGHTING PROCEDURES: Low pressure extinguisher. In case of fire, Use NIOSH/MSHA self contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may produce heavy brown smoke and fumes of: ZnO (zinc), CuO (copper) and CdO (cadmium) - *highly toxic*.

SECTION 5 NOTES: None

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Do not discharge into the drain or bodies of water. Shovel into a suitable container for proper disposal.

PERSONAL PRECAUTIONS: Breathing apparatus (particle filter) if a dust is formed.

ENVIRONMENTAL PRECAUTIONS: See section 12 and 13

SECTION 6 NOTES: None

SECTION 7: HANDLING AND STORAGE

HANDLING: Avoid exposure to dust, do not ingest and avoid contact with eyes. Some individuals can develop an allergic reaction to certain materials. Do not breathe dust. Do not eat, drink, or smoke when using this product. Wash thoroughly after using this product.

STORAGE: Keep material sealed and dry before use and keep children away from product. After using, keep remaining product sealed and dry in original (labeled) packaging and keep children away from product. Keep product away from ammonia, acetylene, bromine azides, hydrogen peroxide, oxalic acid, sulfuric acid and tartaric acid.

SECTION 7 NOTES: None

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Read and understand the manufacturer's instructions and precautionary label on this product.

ENGINEERING CONTROLS: Proper ventilation **must** be maintained.

VENTILATION: Use enough ventilation, local exhaust at the spray area, or both, to keep the fumes and gases below the TLV's in the workers breathing and the general area. Train the worker to keep his head out of the fumes. Monitor fume levels and do not exceed permissible exposure limits or values.

RESPIRATORY PROTECTION: Do NOT breathe fumes. Use a fresh air supplied respirator when brazing or when in a confined space or where local exhaust or ventilation does not keep exposure below the TLV's.

EYE PROTECTION: Wear safety glasses with side shields, face shield, and/or goggles to protect against airborne dust.

PROTECTIVE CLOTHING: Wear gloves when using or prolonged contact with skin or repeated contact with skin is likely. Wear hand and body protection to prevent injury. See ANSI Z49.1.

SKIN PROTECTION: Individuals having sensitive skin may find it beneficial to use a barrier cream or moisturizer when excessive or prolonged contact with skin is likely.

WORK HYGIENIC PRACTICES: Professionally wash contaminated clothing before re-use. Food and drink should not be consumed or tobacco products used, nor cosmetics applied in area where metal exposures are possible.

OTHER PROTECTIVE EQUIPMENT: Full protective equipment normally used in soldering / brazing operation so as to prevent any contact. Review operations to avoid contact with hazardous gas, liquid, or solid. See also:

29CFR 1910.132 - 29 CFR 1910.140 Personal Protective Equipment
29 CFR 1910.251 - 29 CFR 1910.257 Welding, Cutting and Brazing

EXPOSURE GUIDELINES: Use industrial hygiene monitoring equipment to ensure that exposure does not exceed applicable national exposure limits.

EFFECTS OF OVEREXPOSURE - brazing may create one or more of the following health hazards:

FUMES AND GASES can be dangerous to your health.

PRIMARY ROUTES OF ENTRY are the respiratory system. Other possible routes are eyes, ingestion, and/or skin contact.

PREEXISTING respiratory or allergic conditions may be aggravated in some individuals (i.e. asthma, emphysema).

Brazing fumes cannot be classified simply. The composition and quantity of both are dependent upon the metal being brazed, the process, procedure, and the rod used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being brazed (such as paint, plating, or galvanizing), the volume of the work area, the quality and the amount of ventilation, position of the worker's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities).

When the material is consumed, fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section II. Fume and decomposition products, not the ingredients in the rod, are important. Decomposition products include those originating from the volatilization, reaction, or oxidation of materials in Section II, plus those from the base metal and coating, etc., as noted above. These components are virtually always present as complex oxides and not as metals (Characterization of Arc Welding Fume: American Welding Society). Reasonably expected fume constituents of the fume could include: complex oxides of copper, silver, and cadmium. The table below lists reasonably expected fumes that may be generated:

<u>SUBSTANCE</u>	CAS	<u>NUMBER</u>	<u>Exposure Limit (mg/m³)</u>	
			<u>OSHA PEL</u>	<u>ACGIH-TLV</u>
Copper # (as Cu)		7440-50-8	0.1 (as fume)	0.2 (as fume)
Silver #		7440-22-4	0.01	0.1
Cadmium #		7440-43-9	0.005	0.002

Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may also be formed by radiation from the arc. Monitor fume levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: solid rod, no odor.

Changes in the physical state Melting point: ~ 600 °C

Flash point: n.a.

pH-Value: n.a.

Boiling point: n.a.

SECTION 9 NOTES: None

SECTION 10: STABILITY AND REACTIVITY

GENERAL: These items are only intended for brazing application.

STABILITY: Product is chemically stable and non-reactive.

CONDITIONS TO AVOID: Hydrogen fluoride is liberated on heating at high temperatures in the presence of water vapor. Keep product away from ammonia, acetylene, bromine azides, hydrogen peroxide, oxalic acid, sulfuric acid and tartaric acid. Cadmium dust reacts vigorously with oxidizing materials.

MATERIALS TO AVOID: Strong acids and strong bases.

HAZARDOUS POLYMERIZATION: Will not occur.

REACTIVITY: None.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Hydrogen fluoride is liberated on heating at high temperatures in the presence of water vapor.

SECTION 10 NOTES: In other countries the exposure limits listed in Section 2 may be different and the appropriate country standards should be used.

SECTION 11: TOXICOLOGICAL INFORMATION

Threshold Limit Value: The **ACGIH** recommended general limit for welding fume NOS (not otherwise specified) is 5 mg/m³. The **ACGIH 1999** preface states: "The **TLV-TWA** should be used as guides in the control of health hazards and should not be used as firm lines between safe and dangerous concentrations." See Section V for specific fume constituents that may modify the **TLV**. Brazing/welding vapours and fumes from brazing/welding may cause metal fumes fever. Symptoms can appear 4 to 12 hours after. (headache, dizziness, dryness, cough, nausea and fever).

ACUTE TOXICITY: Very toxic by inhalation.

SHORT TERM (ACUTE) OVEREXPOSURE: Cadmium, copper and zinc fumes produce **METAL FUME FEVER** which may result in severe tracheobronchitis, pneumonitis, pulmonary edema (throat dryness, cough, headache, vomiting, chest pains, and chills). Suspected acute inhalation exposure to **CADMIUM** must be treated for pulmonary edema by a physician. Delay until onset of pulmonary involvement may result in death. Cadmium is transported via blood and stored in liver and kidneys. Can cause

kidney damage. Excessive inhalation of zinc fumes may produce symptoms known as **ZINC SHAKES**; an acute self limiting condition without recognized complications. Symptoms usually disappear within 24 hours. Symptomatic treatment such as bed rest, possibly aspirin or aspirin-free pain reliever to afford relief from fever and chills. Severe and prolonged overexposure to zinc oxide may cause pulmonary edema and pneumonia. **FLUORIDES** - Overexposure to fluorides can cause serious bone erosion, excessive calcification of the bone and calcification of the ribs, pelvis and spinal column. May cause skin rash.

CHRONIC TOXICITY: LONG TERM (CHRONIC) OVEREXPOSURE is believed by some investigators to affect pulmonary functions. Target organs are eyes, skin, and respiratory system. **EFFECTS OF CHRONIC EXPOSURE: PHYSIOLOGICAL EFFECTS:** Chronic inhalation of **CADMIUM** oxide dusts and fumes has caused tubular dysfunction as evidenced by protainuria. Other disorders have included pulmonary emphysema, anemia, bone demineralization, and impotency. Symptoms of over-exposure to copper fumes include irritation to the eyes, upper respiratory system, metal fume fever, chills, muscle aches, nausea, fever, dry throat, cough, lassitude (weakness, exhaustion), metallic or sweat taste, and discoloration of skin. **FUMES AND GASES** can be dangerous to your health. Primary route of entry is inhalation of fumes. Preexisting respiratory or allergic conditions may be aggravated in some individuals. **FLUORIDES** - Fluoride compounds produced may cause eye and skin burns, and pulmonary edema bronchitis. Exposure to extremely high levels of fluorides can cause abdominal pain, diarrhea, muscular weakness, and convulsions. In extreme cases it can cause loss of consciousness and death.

SECTION 11 NOTES: AVOID DIRECT INHALATION OF FUMES DURING HEATING. AVOID INHALATION OR INGESTION OF DUST. DO NOT ALLOW DUST TO ACCUMULATE. MONITOR FUME LEVELS.

SECTION 12: ECOLOGICAL INFORMATION

CONTAMINATED PACKAGING: Empty containers should be taken for local recycling, recovery, or waste disposal. Metals may be recycled.

SPILLS: Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment.

SECTION 12 NOTES: Do not flush into surface water or sanitary sewer system.

SECTION 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL METHOD: Dispose of any rod and waste residues in accordance with EPA or local regulations.

SECTION 13 NOTES: Review U.S. Federal Hazardous Waste Regulations §40 CFR261 to determine if this is hazardous in USA. Please be advised that state and local requirements, or other country requirements, for waste disposal may be more restrictive or otherwise different than U.S. Federal regulations. It is not possible to give this product a waste code number according to the European waste catalogue because only the intended use of the user consents the assignment of a specific code number.

SECTION 14: TRANSPORTATION INFORMATION

DOMESTIC TRANSPORT REGULATIONS (USA): DOT - not regulated.

DOMESTIC TRANSPORT REGULATIONS (CANADA): TDG - not regulated.

DOMESTIC TRANSPORT REGULATIONS (MEXICO): MEX - not regulated.

INTERNATIONAL TRANSPORT REGULATIONS:

ICAO – not regulated

IATA – not regulated

IMDG / IMO – not regulated

OTHER AGENCIES: No international regulations or restrictions are applicable.

SECTION 14 NOTES: Handle with care to avoid damaging the product.

SECTION 15: REGULATORY INFORMATION

Read and understand the manufacturer's Safety Data Sheet before handling or disposing of this product.

U.S. EPA TSCA (TOXIC SUBSTANCE CONTROL ACT): All constituents of these products are on the TSCA inventory list or are excluded from listing.

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center and to our Local Emergency Planning Committee.

EPCRA/SARA TITLE III 313 TOXIC CHEMICALS:

The following metallic components are listed as SARA 313 "TOXIC CHEMICALS" and are potentially subject to annual SARA 313 reporting. See Section 3 if the ingredient is present and for percent.

<u>INGREDIENT NAME</u>	<u>CAS NUMBER</u>	<u>DISCLOSURE THRESHOLD</u>
Cadmium	7440-43-9	0.1 % de minimis concentration
Chromium & chromium compounds	7440-47-3	1.0 % de minimis concentration
Chromium VI	Not listed	0.1 % de minimis concentration
Barium compounds	Not listed	1.0 % de minimis concentration
Cobalt	7440-48-4	0.1 % de minimis concentration
Copper	7440-50-8	1.0 % de minimis concentration
Manganese	7439-96-5	1.0 % de minimis concentration
Nickel	7440-02-0	0.1 % de minimis concentration
Aluminum (fume or dust)	7429-90-5	1.0 % de minimis concentration
Silver	7440-22-4	1.0 % de minimis concentration

SECTION 15 NOTES: International rules may vary and the appropriate regulations should be followed as defined by the country where the product is used.

SECTION 16: OTHER INFORMATION

Read and understand the manufacturer's instructions and precautionary label on this product.

See American National Standard Z49.1, Safety in Welding and Cutting, published by the "American Welding Society," 550 N.W. LeJeune Road, Miami, FL 33126 and OSHA Publication 2206 (29CFR 1910), U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 for more detail on safe use of product.

Boric acid C ≥ 5,5 %

R60 : May impair fertility.

R61 : May cause harm to the unborn child.

S53 : Avoid exposure - obtain special instructions before use.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Potassium Bifluoride

R22: Harmful if swallowed

Potassium Fluoride

R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed.

Cadmium

R45 : May cause cancer.

R26 : Very toxic by inhalation.

R48/23/25 : Toxic: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.

R62 : Possible risk of impaired fertility.

R63 : Possible risk of harm to the unborn child.

R68 : Possible risk of irreversible effects.

R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S53 : Avoid exposure - obtain special instructions before use.

S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 : This material and its container must be disposed of as hazardous waste.

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

Sodium Fluoride

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

SUPPLEMENTAL INFORMATION – DEFINITIONS:

IARC: International Agency for the Research on Cancer

NIOSH: National Institute for Occupational Safety and Health

OSHA: U.S. Occupational Safety and Health Administration

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service Registry Number

EINECS: European Inventory of Existing Chemical Substances

PEL: Permissible Exposure Limit

NTP: National Toxicology Program

TLV: Threshold Limit Value

ECD: European Council Directive

GHS: Globally Harmonized System

The information in this SDS was obtained from sources we believe are reliable. However, this information is provided without any representation or warranty, expressed or implied, regarding accuracy or correctness. The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons we do not assume responsibility and expressly disclaim liability of loss, damage, or expense arising from it or any way connected with the handling, storage, use, or disposal of the product.