SAFETY DATA SHEET

Date Accessed: 03/28/2024
Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Name: Copper(II) Tetrafluoroborate

Product Number: All applicable American Elements product codes, e.g. CU2-FBAT-02 , CU2-FBAT-03 , CU2-FBAT-04 , CU2-FBAT-05

CAS #: 38465-60-0

Relevant identified uses of the substance: Scientific research and development

Supplier details:
American Elements
10884 Weyburn Ave.
Los Angeles, CA 90024
Tel: +1 310-208-0551
Fax: +1 310-208-0351

Emergency telephone number:
+1 800-424-9300

SECTION 2. HAZARDS IDENTIFICATION

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 1 Sub-category B Serious eye damage/eye irritation Category 1
Label elements
Signal word Danger
Hazard statements


/div>
Symbols/Pictograms
Harmful if swallowed
Causes severe skin burns and eye damage
Precautionary Statements - Prevention Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
Immediately call a POISON CENTER or doctor/physician
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 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
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
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)
Hazards not otherwise classified (HNOC) N/A
Other Information
NFPA
Health hazards - Flammability -
HMIS
Health hazards 3
Flammability 0
Stability - Physical hazards 1
Physical and chemical - properties
Personal protection -

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS No 38465-60-0
Molecular Weight 237.16
Formula Cu(BF4)2
Chemical Name CAS No Weight % Oral LD50 Dermal LD50 Inhalation LC50
Copper(II) tetrafluoroborate 38465-60-0 >98 - - -

SECTION 4. FIRST AID MEASURES

First Aid Measures
General advice Consult a physician if necessary. Remove to fresh air.
Eye contact Wash with plenty of water.
Skin Contact Wash skin with soap and water.
Inhalation Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration
Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.
Most important symptoms and effects, both acute and delayed
Symptoms No data available.
Indication of any immediate medical attention and special treatment needed
Note to physicians Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES

Suitable Extinguishing Media
Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the
surrounding environment. Unsuitable Extinguishing Media None.
Specific hazards arising from the chemical
Specific hazards arising from the chemical
No data available.
Hazardous combustion products Hydrogen fluoride.
Explosion data
Sensitivity to Mechanical Impact No data available.
Sensitivity to Static Discharge No data available.
Protective equipment and precautions for firefighters
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.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal precautions Ensure adequate ventilation, especially in confined areas.
Environmental precautions
Environmental precautions See Section 12 for additional Ecological Information. Prevent product from entering drains.
Should not be released into the environment.
Methods and material for containment and cleaning up
Methods for containment Prevent further leakage or spillage if safe to do so.
Methods for cleaning up Pick up and transfer to properly labeled containers.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling
Advice on safe handling May cause damage to organs through prolonged or repeated exposure.
Conditions for safe storage, including any incompatibilities Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room
temperature.
Incompatible materials None known based on information supplied.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
Exposure Guidelines .
Chemical Name ACGIH TLV OSHA PEL NIOSH IDLH
Copper(II) tetrafluoroborate
38465-60-0 TWA: 1 mg/m3 Cu dust and mist - IDLH: 100 mg/m3 Cu dust and mist
TWA: 1 mg/m3 Cu dust and mist
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 Wear safety glasses with side shields (or 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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State liquid
Appearance No data available
Odor No data available
Property Values
pH No data available
Melting point/freezing point No data available
Boiling point No data available
Flash point
No data available
Density No data available
Evaporation rate No data available
Upper flammability limits No data available
Lower flammability limit No data available
Vapor pressure 17
Vapor density No data available
Specific gravity No data available
Water solubility No data available
Solubility in other solvents No data available
Partition coefficient No data available
Autoignition temperature No data available
Decomposition temperature No data available
Kinematic viscosity No data available
Explosive properties No data available
Oxidizing properties No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity
N/A
Chemical stability Stable under recommended storage conditions. Possibility of Hazardous Reactions None under normal processing.
Hazardous polymerization No data available.
Conditions to avoid Extremes of temperature and direct sunlight. Incompatible materials Strong oxidizing agents.
Hazardous Decomposition Products Hydrogen fluoride.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation No data available.
Eye contact No data available. Skin Contact No data available. Ingestion No data available.
Information on toxicological effects
Symptoms No data available.
Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity May cause adverse liver effects.
Target Organ Effects Eyes, Respiratory system, Kidney, Liver, Skin.
Numerical measures of toxicity - Product Information
Unknown acute toxicity No data available
The following values are calculated based on chapter 3.1 of the GHS document
ATEmix (oral) 500 mg/kg

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity May cause long lasting harmful effects to aquatic life
100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.
Persistence and degradability No data available.
Bioaccumulation No data available.
Mobility No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal of wastes Should not be released into the environment. 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
California Hazardous Waste Status 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
Copper(II) tetrafluoroborate
38465-60-0 Toxic

SECTION 14. TRANSPORT INFORMATION

DOT
UN/ID no UN3264
Hazard Class 8
Packing Group II
Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II
Emergency Response Guide Number 154
IMDG
UN/ID no UN3264
Hazard Class 8
Packing Group II
Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II Special Provisions 274
EmS-No F-A, S-B
IATA
UN/ID no UN3264
Hazard Class 8
Packing Group II
Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s.
Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s., 8, II

SECTION 15. REGULATORY INFORMATION

International Inventories
All of the components in the product are on the following Inventory lists
TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)
ENCS (Japan): Philippines (PICCS)
Chemical Name TSCA DSL NDSL EINECS ELINCS ENCS IECSC KECL PICCS AICS
Copper(II) tetrafluoroborate X - X X - X X X X X
X - Listed
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
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 hazard No Reactive hazard No
CWA (Clean Water Act)
This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21
and 40 CFR 122.42).
Chemical Name CWA - Reportable
Quantities CWA - Toxic Pollutants CWA - Priority Pollutants CWA - Hazardous
Substances
Copper(II) tetrafluoroborate
38465-60-0 X
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
Copper(II) tetrafluoroborate
38465-60-0 X Not Listed X

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

AMERICAN ELEMENTS | 10884 WEYBURN AVE. | LOS ANGELES, CALIFORNIA 90024
TEL. 310-208-0551 | FAX 310-208-0351 | customerservice@americanelements.com