CHIPQUIK® Stained Glass Soldering Flux

Safety Data Sheet (SDS)

www.chipquik.com

To comply with European CLP Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878, US 29CFR 1910.1200 OSHA's Hazard Communication Standard, and Australian NOHSC: 1008 [2004] and ADG Code 7.4

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Chip Quik® Stained Glass Soldering Flux SGF1
SYNONYMS:
PART NUMBERS: SGF1-4OZ, SGF1-8OZ

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REVISION DATE: 2023/12/13
REVISION NUMBER: 1.7
REVISED BY: Chip Quik Product Safety

PRODUCT USE: Soldering Stained Glass.

2. HAZARD IDENTIFICATION

Classified in accordance with European CLP Regulation 1272/2008

Skin Corrosion:	3	H315, H317
Acute Toxicity (oral)	5	H302
Acute Toxicity (dermal)	4	H317
Eye Irritant	2B	H319
Skin Irritant	2	H315
Skin Sensitization	1	H317
Specific Target Organ Toxicity (STOT) – Single Exposure (SE) Respiratory Tract Irritation	3	H332, H335

CHEMICAL NAME: NA
CHEMICAL FAMILY: Mixture
CHEMICAL FORMULA: Proprietary

ROUTES OF ENTRY: Inhalation, Ingestion, Skin/Eye Contact

TARGET ORGANS: NA

GHS/CLP:

Signal Word: Warning

GHS/CLP LABEL ELEMENTS:

Hazard statement(s)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

Precautionary statement(s)

P102	Keep out of reach of children.
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P233	Keep container tightly closed.

P260	Do not breathe dust/fume/gas/mist/vapor/spray.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink, or smoke when using this product.
P271	Use in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	In case of inadequate ventilation wear respiratory protection.
P301/P330/P331/P310	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting. Immediately call a POISON CENTER/Doctor.
P303/P361/P352/P333/P313	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Wash with soap & water. Get medical advice/attention if skin irritation or rash occurs or if you feel unwell.
P304/P340/312	IF INHALED: Remove victim to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
P305/P351/338/P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call POISON CENTER/Doctor.
P308/P313	IF EXPOSED OR CONCERNED: Get medical advice/attention.
P342/P311	IF EXPERIENCING RESPIRATORY SYMPTOMS: Call POISON CENTER/Doctor.
P362	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P402/P404	Store in a dry place. Store in a closed container.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

OTHER HAZARDS:
None known.

SECTION 2 NOTES:
Chip Quik Inc. does not recommend, manufacture, market, or endorse any of its products for human consumption.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Classified in accordance with European CLP Regulation 1272/2008

Hazardous Ingredients (1)	C.A.S. Number	Weight Percent	OSHA PEL mg/m^3	ACGIH TLV TWA mg/m^3	LD 50 Ingested g/Kg	LD 50 Inhaled g/m^3
Zinc Chloride	7440-55-3	12 – 18	NE	NE	NE	NE
Water	7440-74-6	Balance	NE	NE	NE	NE

SECTION 3 NOTES:
(1) Per 29 CFR 1910 the mixture has not been tested as a whole. All hazardous components, which comprise 1% of the mixture (0.1% carcinogenic), are listed. Percentages of individual components are not listed as this information is considered a trade secret.

4. FIRST-AID MEASURES

Emergency first aid procedures:

EYES: Flush with plenty of water, contact a physician. If contact lenses can be removed easily, flush eyes without contact lenses.

SKIN: Wash affected area with plenty of warm, soapy water. If irritation persists, seek medical attention.

INGESTION: Call a physician or Poison Control Center immediately. Do not induce vomiting. Drink large amounts of water. Never give anything by mouth to an unconscious person

INHALATION: Remove to fresh air. Support respiration if required. If not breathing, seek immediate medical attention.

Most important symptoms and effects, both acute and delayed:

Acute: Exposure to eyes can cause severe cornea injury and result in permanent impairment of vision or even blindness. Do not wear contact lenses. Overexposure can cause irritation to mucous membranes and sensitive skin. If swallowed, can result in severe gastrointestinal irritation leading to nausea and vomiting.

Chronic: Repeated skin exposure can lead to dermatitis.

5. FIREFIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, foam
Alcohol-resistant foam
Carbon Dioxide (CO2)
Water Spray

SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH-approved self-contained Breathing Apparatus and full protective clothing if involved in a fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Hazardous combustion products: May release zinc oxide fumes, zinc chloride fumes, or hydrogen chloride gas in a fire.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS AND EQUIPMENT: Wear appropriate personal protective equipment: rubber gloves, safety glass or goggles, chemical resistant coveralls or apron, rubber boots and an approved respirator. Absorb spill with absorbent pads or other suitable absorbent material.

ACCIDENTAL RELEASE MEASURES: If material spills or leaks collect using absorbent material and place it in a plastic or glass jar. Remove traces of residue using cloth rags or paper towels. Follow on-site personal protective equipment recommendations.

ENVIRONMENTAL PRECAUTIONS: Avoid release to the environment. Collect spillage.

SECTION 6 NOTES:
See Sections 2, 4, and 7 for additional information.

7. HANDLING AND STORAGE

HANDLING/STORAGE: Keep containers tightly closed when not in use. Use care to avoid spills. Avoid inhalation of fumes or dust. Avoid contact with eyes, skin, and clothing. Store in a closed corrosive resistant container, with corrosive resistant liner, in cool dry place. Wear appropriate personal protective equipment when working with or handling. Always wash hands thoroughly after handling this product. Dispose of following Federal, State/Provincial, and Local regulations.

OTHER PRECAUTIONS: Empty containers may retain product residues in vapor, liquid, and/or solid form. All labeled hazard precautions should be observed.

WORK HYGIENIC PRACTICES: Cosmetics/Food/Drink/Tobacco should not be consumed or used in work areas. Always wash hands after handling material and before applying or using cosmetics/food/drink/tobacco.

SECTION 7 NOTES:
Keep out of reach of children.
Not for internal consumption.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limit:

Substance	ACGIH	OSHA	NIOSH
Zinc Chloride	TLV 1 mg/m^3 STEL 3 mg/m^3	PEL 1 mg/m^3 as fume	TLV 1 mg/m^3 STEL 2 mg/m^3

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance Name	End Use	Exposure Route	Potential Health Effects	Value

NA

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance Name	Environmental Compartment	Value

NA

Also see section 3.

ENGINEERING CONTROLS: Use only with production equipment designed for use with Liquid Zinc Stained Glass Soldering Flux.

VENTILATION: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLVs.

RESPIRATORY PROTECTION: A (US: NIOSH; EU: EN 140:1998, EN 14387:2004 A) approved air-purifying respirator with fume/organic chemical cartridge should be worn when airborne concentrations may be exceeded. General and local exhaust ventilation is the preferred means of protection.

EYE PROTECTION: Use with appropriate eye protection: Goggles or face shield (EU: EN 166-S 3 9).

SKIN PROTECTION: Protective gloves should be worn when the possibility of skin contact exists (EU: EN 374-1:2003).

PROTECTIVE CLOTHING OR EQUIPMENT: Work clothes should be worn and laundered in accordance with current standards (US: OSHA).

WORK HYGIENIC PRACTICES: Cosmetics/Food/Drink/Tobacco should not be consumed or used in areas where solder products may be used. Always wash hands after handling soldering products and before applying or using cosmetics/food/drink/tobacco.

OTHER: Maintain eye wash stations in work areas. Avoid the use of contact lenses in high fume areas. Clean protective equipment regularly. Clean up spills immediately.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear Liquid
ODOR:	Odorless
ODOR THRESHOLD:	NE
pH as SUPPLIED:	4
MELTING POINT:	102°C
FREEZING POINT:	0°C
INITIAL BOILING POINT:	102°C
BOILING RANGE:	102°C
FLASH POINT:	NA
EVAPORATION RATE:	NA
FLAMMABILITY (solid):	NE
UPPER/LOWER FLAMMABILITY:	NE

UPPER/LOWER EXPLOSIVE LIMITS:	NE
VAPOR PRESSURE (mmHg):	NA
VAPOR DENSITY (AIR = 1):	NA
RELATIVE DENSITY:	1.15
SOLUBILITY IN WATER:	NA
PARTITION COEFFICIENT (n-octanol/water):	NE
AUTOIGNITION TEMPERATURE:	NE
DECOMPOSITION TEMPERATURE:	NE
VISCOSITY:	NA

9.2 Other Information
9.2.1 Information with regard to physical hazard classes
No additional information available.
9.2.2 Other safety characteristics
No additional information available.

10. STABILITY AND REACTIVITY

STABILITY:	Stable under normal conditions
CONDITIONS TO AVOID (STABILITY):	Avoid contact with incompatible materials listed below
INCOMPATIBILITY (MATERIAL TO AVOID):	Incompatible products: cyanides and sulfides
HAZARDOUS DECOMPOSITION/BY-PRODUCTS:	Hazardous combustion products: May release zinc oxide fumes, zinc chloride fumes, or hydrogen chloride gas in a fire.
POSSIBILITY OF HAZARDOUS REACTIONS:	None known, based on information available

11. TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Skin Contact, Ingestion, Eye Contact

ACUTE TOXICITY:

Chemical	DERMAL	EYES	INHALATION	ORAL
Zinc Chloride	Not Listed	Not Listed	Not Listed	LD50 Oral (Rat) 350 mg/kg

SKIN CORRISION/IRRITATION:	May cause skin irritation.
INGESTION:	Harmful if swallowed. May cause damage to the digestive tract. May cause gastrointestinal irritation.
SERIOUS EYE DAMAGE/IRRITATION:	Causes severe eye irritation and possibly burns. May cause irreversible eye injury.
INHALATION / RESPIRATORY:	May cause severe irritation of the respiratory tract and mucous membranes with sore throat, coughing, shortness of breath, and delayed lung edema.

CHRONIC TOXICITY:

INHALATION:	Prolonged or repeated exposure may cause respiratory damage
SKIN:	Prolonged or repeated skin contact may cause dermatitis
SPECIFIC TARGET ORGAN TOXICITY:	Chronic exposure can result in permanent liver, kidney and respiratory system effects. Minimize exposure as a precaution.

GERM CELL MUTAGENICITY: NA

CARCINOGENICITY:

OSHA: NA	**ACGIH:** NA	**NTP:** NA	**IARC:** NA

REPRODUCTIVE TOXICITY:	Tests in some animals indicate this chemical may have embryotoxic activity.
MUTAGENICITY:	Tests in bacterial or mammalian cell cultures demonstrate mutagenic activity.
STOT-SINGLE EXPOSURE:	May cause severe eye damage. May cause irritation to skin and mucous membranes. Ingestion in large quantity may compromise multiple organs.
STOT-REPEATED EXPOSURE:	Prolonged or repeated exposure may cause permanent liver, kidney and respiratory damage.
ASPIRATION HAZARD:	NA

11.2 Information on other hazards:
11.2.1 Endocrine disrupting properties:
The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.
11.2.2 Other information:
To the best of our knowledge, the information contained herein is accurate. However, neither the above-named manufacturer, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SECTION 11 NOTES:
This product has not been tested as a whole to determine its hazards. Synergistic or additive effects of the above chemicals are unknown, as are the effects of exposure to these chemicals in addition to others present in the work place. See Section 2 for additional health hazards.

12. ECOLOGICAL INFORMATION

TOXICITY:	Zinc Chloride is a marine pollutant.
PERSISTENCE AND DEGRADIBILITY:	This product will biodegrade.

BIOACCUMULATIVE POTENTIAL:

Product/Ingredient Name	$LogP_{ow}$	BCF	Potential

NA

MOBILITY IN SOIL:	NE
RESULT OF PBT and vPvB ASSESSMENT:	NA
12.6 Endocrine Disrupting Properties:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher
12.7 OTHER ADVERSE EFFECTS:	No known significant effects or critical hazards

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Scrap and waste should be recycled or stored in a dry, sealed container for later disposal. Disposal must be in accordance with Federal, State/Provincial, and Local Regulations.

OTHER PRECAUTIONS: Avoid skin & eye contact, inhalation & ingestion of fumes and material. Wash contaminated clothing before reuse. Keep away from children.

14. TRANSPORT INFORMATION

Transport in accordance with applicable regulations and requirements.

UN Number:	Not available
UN Proper Shipping Name:	Not available
Packaging Group:	Not applicable
Environmental Hazards:	None

TRANSPORT HAZARD CLASSES:

US DOT Hazardous Material Classification:	Non-Hazardous
Water Transportation:	Non-Hazardous
IATA Hazardous Material Classification:	Non-Hazardous
ADR Road Regulations	Not regulated
IMDG Sea Regulations	Not regulated
ADG Land Transportation	Not regulated

15. REGULATORY INFORMATION

United States Regulatory Information:

TSCA 8 (b) Inventory Status:	All components are listed or are exempt from listing on the Toxic Substances Control Act (TSCA) Inventory.
TSCA 12 (b) Export Notification:	Not required.

Canada Regulatory Information:

CEPA DSL/NDSL Status:	All components are listed on or are exempt from listing on the Canadian Domestic Substances List.

U.S. FEDERAL REGULATIONS:	Not regulated
STATE REGULATIONS:	Not regulated
INTERNATIONAL REGULATIONS:	Not regulated
AUSTRALIAN REGULATIONS:	Not regulated

16. OTHER INFORMATION

LEGEND:

ACGIH	American Conference of Governmental Industrial Hygienists
ADG	Australian Dangerous Goods Code
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
AICS	Australian Inventory of Chemical Substances
BCF	Bioconcentration factor
C.A.S.	Chemical Abstract Service
CLP	Classification, Labeling and Packaging
DOT	Department of Transportation
EC	Effective Concentration
EPA	Environmental Protection Agency
GHS	Global Harmonized System
HMIS	Hazardous Material Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal Concentration
LD	Lethal Dose
NA	Not available
NE	Not established
NIOSH	National Institute for Occupational Safety & Health
NOEC	No observed effective concentration
NOHSC	National Occupational Health and Safety Commission (Australia)
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
P_{ow}	Octanol water partition coefficient

SDS	Safety Data Sheet
STEL	Short-Term Exposure Limit
STOT	Specific target organ toxicity
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA:	Time Weighted Average
US DOT:	United States Department of Transportation

PREPARATION INFORMATION:
This update supersedes all previously released documents.

DISCLAIMER:
The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to Chip Quik at the time of issue. No warranty, guarantee, or representation is made by Chip Quik nor does Chip Quik assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. The data on this Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process. All chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet as a source for hazard information.