

MATERIAL 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 I (IDENTIFICATION)

**MANUFACTURER/
SUPPLIERS NAME:** **MESSER – MG Welding Products**
N94 W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA

TELEPHONE NUMBER:
262-532-4677

PRODUCT NAME: **MG 120 LF (Formerly MG 860)**

PRODUCT CLASSIFICATION: **Active Acid Solder Flux**

SECTION II (HAZARDOUS INGREDIENTS/IDENTITY INFORMATION)

IMPORTANT: This section covers the materials from which these products are manufactured. The fumes and gases produced during normal use of these products are covered in Section V. The term "Hazardous" in "Hazardous Ingredients" should not only be interpreted as a term required and defined in OSHA Hazard Communication Standard (29 CFR Part 1910.1200), but also as defined by other regulatory agencies. 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 #.

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.)

INGREDIENTS	CAS NUMBER	Exposure Limit (mg/m³)		Percent Ingredients (by weight)	HAZARD
		OSHA PEL	ACGIH-TLV		
Zinc Chloride #	7646-85-7	1	1	< 45	ACGIH
Ammonium Chloride	12125-02-9	Not listed	10	n/a	ACGIH
Hydrochloric Acid	7647-01-0	7 (ceiling)	2.98 (ceiling)	< 1.0%	OSHA
Water	7732-18-5	Not listed	Not listed	n/a	-
Glycerin	56-81-5	5	10	n/a	ACGIH

DANGER: Causes severe burns to skin, eyes, and respiratory system. May be fatal if swallowed. Remaining ingredients, if any are classified and claimed as trade secret.

SECTION III (POTENTIAL HEALTH EFFECTS AND HEALTH HAZARD DATA)**Target organ statement**

DANGER: Causes severe burns to skin, eyes, and respiratory system. May be fatal if swallowed or inhaled.

OSHA PEL: not established-mixture

Effects of Chronic Exposure: Contact burns, irritation to skin (scarring), eyes, and respiratory system. Possible liver and kidney effects.

EFFECTS OF ACUTE OVEREXPOSURE

Swallowing	May be fatal. Can cause damage to digestive system. Corrosive to mucous membranes
Skin absorption	None currently known.
Inhalation	Irritation to respiratory system. Coughing and sneezing. Existing lung disorders will be aggravated.
Skin Contact	Dermatitis, possible chemical burns, corrosive to skin. Existing disorders will be aggravated.
Eye Contact	Irritation to the eyes, tearing, burn of the eye surfaces, corrosive to the eyes, may cause blindness.

SECTION IV (EMERGENCY AND FIRST AID PROCEDURES)

Swallowing: Call a physician at once or your poison control center. Advise of Section II immediately. May be fatal. Corrosive to mucous membranes.

Skin: Promptly flush with water to remove all residue. If rash or burn develops, consult a physician. Material is corrosive.

Inhalation: Remove to fresh air. If fumes are inhaled, call a physician.

Eyes: Flush with water for at least 15 minutes to remove all residue. **Get immediate medial help - blindness may result.**

SECTION V (FIRE AND EXPLOSION DATA)

Flashpoint: N/A

Flammable limits in air (% by volume): N/A

Extinguishing media: water, fog, or foam

Special fire fighting procedures: full protective equipment required. May release zinc oxide and HCl fumes. Toxic metal halide fumes are produced.

Unusual fire and explosion hazards: Dense smoke may be generated.

Rating under HMIS: Health, 3; Flammability, 0; Reactivity, 0.

SECTION VI (REACTIVITY DATA)

Stability consideration: stable

Conditions to avoid: none

Hazardous polymerization: will not occur

Conditions to avoid: none

Incompatibility: Materials to avoid: none

Hazardous combustion or decompositions products: Hydrogen chloride and zinc oxide.

SECTION VII (SPILL AND LEAK RESPONSE)

Steps to be taken if material is released or spilled: Contain spill, absorb, sweep up and dispose. Flush area to chemical sewer.

Waste disposal method: Dispose of in accordance with all federal state, and local regulations.

SECTION VIII (SPECIAL PROTECTION INFORMATION)

Respiratory protection: If the workstation is not properly ventilated to exhaust all fumes and vapors, use a NIOSH approved mask.

Ventilation: Maintain airflow away from the user to remove all fumes and vapors, so that the PEL is never exceeded. Adhere to environmental regulations for exhausts. Monitor Fume Levels.

Protective gloves: Chemical and acid impervious.

Eye protection: Chemical tight safety goggles. Do NOT wear contact lenses.

Other protective equipment: Full protective equipment normally used in soldering 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

SECTION IX (STORAGE, HANDLING AND SPECIAL PRECAUTIONS)

Precautions to be taken in handling and storage: Store flux at ambient conditions. Wash thoroughly after handling to remove all residue.

Other precautions: Do NOT breathe fumes. Professionally wash contaminated clothing before reuse. Existing lung disorders will have increased toxic susceptibility.

SECTION X (PHYSICAL AND CHEMICAL PROPERTIES)

Boiling point: (F @ 760mm HG): 215

Specific Gravity: 1.46

Percent Volatiles by volume: 50

Evaporation rate (Butyl Acetate=1) < 1

Appearance and odor: Water clear liquid with no characteristic odor.

SECTION XI (OPTIONAL INFORMATION)

Department of Transportation: Proper shipping name; Corrosive liquid, N.O.S. (Zinc Chloride, hydrochloric acid)

Hazard class: 8

ID & Pack. Group Number: UN 1760, PG III

ERG Guide Number: 60

Toxic Substances Control Act: all components of this compound are listed within the TSCA inventory.

SARA Title II Program: This product contains the following toxic chemicals subject to reporting requirements of EPCRA of 1986 and 40 CFR 372:

<u>Chemical name</u>	<u>CAS nr.</u>	<u>Concentration</u>
Zinc compounds:	N/E	< 45 %

This information must be included in all MSDS that are copied and distributed for this material.

State Right to Know Programs:

Pennsylvania: All components are listed in PA code Title 34, Hazardous Substance List.

California: As currently manufactured this material contains no compounds subject to reporting and labeling requirements of Proposition 65.

Miscellaneous: Material contains in excess 10% Zinc Chloride: Classified as a marine pollutant.

Other regulations may apply when shipping this material and are in the process of change or update, verify all applicable regulations prior to shipment either domestically, internationally via air, ground, or water.

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**.

Exposure limits are subject to change. Contact ACGIH, OSHA, NIOSH, and IARC for current values.

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