MAGNASTRIP™ 610

1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: MAGNASTRIP™ 610
SDS Number: N8707
Revision Date: 3/12/2021
Version: 2103
Internal ID: N8707
Product Use: Solder Mask Remover for Halogen-Free Laminate

Vendor Details: RBP Chemical Technology, Inc.
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2 HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):
Health, Skin corrosion/irritation, 1
Health, Serious Eye Damage/Eye Irritation, 1
Health, Specific target organ toxicity - Single exposure, 3

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage
H336 - May cause drowsiness or dizziness

GHS Precautionary Statements:

P260 - Do not breathe fume, gas, mist, vapors, or spray.
P264 - Wash skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves, eye and face protection, and protective clothing.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321 - Specific treatment (see Section 4 on this label).
P363 - Wash contaminated clothing before reuse.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents and container in accordance with local, national, and international regulations.

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

No additional information identified.

Percentage of components with Unknown Acute Toxicity:
Oral: 68%

Dermal: 68%
Inhalation: 68%

3 COMPOSITION/INFORMATION OF INGREDIENTS

CAS#	%	Chemical Ingredients: Chemical Name:
141-43-5	10-30%	Ethanolamine
107-41-5	10-30%	Hexylene glycol
1310-73-2	10-20%	Sodium hydroxide
111-76-2	1-5%	2-Butoxyethanol

*Components not listed are either non-hazardous or are below reportable limits. *A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality, or is due to batch variation.

4 FIRST AID MEASURES

Inhalation: IF INHALED: Move to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Skin Contact: IF ON SKIN: Remove immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. Wash contaminated clothing before reuse.

Eye Contact: IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Ingestion: IF SWALLOWED: Rinse mouth. Do not induce vomiting. Drink large quantities of water. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. Keep head below hips to prevent aspiration if spontaneous vomiting occurs.

Most important symptoms/effects, acute and delayed: Contact with this material will cause severe burns to the skin, eyes and mucous membranes. Symptomas include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. See Section 11 - Toxicological information.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. For chemical burns, flush with water immediately. Symptoms of exposure may be delayed.

General information: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. For personal protection, see Section 8 of the SDS. Wash contaminated clothing before reuse.

5 FIRE FIGHTING MEASURES

Personal Protective Equipment For Fire Fighters: Wear protective clothing including NIOSHapproved self-contained breathing apparatus.

Suitable Extinguishing Media: Water fog, dry chemical powder, carbon dioxide, or alcohol-resistant foam.

Unsuitable Extinguishing Media: Do not use water jet, as this will spread the fire. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Specific Hazards Arising from the Substance or Mixture Hazards during fire-fighting: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:
Use Personal Protective Equipment to clean up spills. Do not touch or walk through spilled materials. As an immediate precautionary measure, isolate spill or leak area. This product contains components that are hazardous to aquatic life. Keep out of drains, sewers, ditches, and waterways.

Methods for Containment and Clean-Up
Small Spill: Absorb spill with vermiculite or other inert material (such as sand or other non-combustible material) and transfer to containers for later disposal.

Large Spill: Dike far ahead of liquid for later disposal. Use absorbant pads to contain. Collect up and place in a chemical waste container for disposal. Clean surface thoroughly to remove residual contamination. Water spray may reduce vapor, but will not prevent ignition in closed spaces.

Other Information: US Regulations may require reporting spills of hazardous materials. See Section 15: Regulatory Information for details on reportable quantities, if any.

7 HANDLING AND STORAGE

Handling Precautions: Do not breathe dust, fumes, gasses, mists, vapors, and/or sprays. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye and face protection, and protective clothing. Wash skin thoroughly after handling.

Storage Requirements: Keep container tightly closed in a cool, dry, and well-ventilated place. Store locked up. Store away from incompatibles (See Section 10).

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mist below their respective threshold limit value.

Personal Protective Equipment: Respiratory protection: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves 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.

Eye/Face protection: Tightly fitting safety goggles. Face-shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Wear appropriate chemical-resistant clothing.

Exposure Guidelines for Components:

Ethanolamine (141-43-5)
- ACGIH TLV: 3 ppm TWA
- ACGIH TLV: 6 ppm STEL
- OSHA PEL: 3 ppm (approx. 8 mg/m3) TWA
- OSHA PEL: 6 ppm (approx. 15 mg/m3) STEL
- NIOSH: 3 ppm (approx. 8 mg/m3) TWA
- NIOSH: 6 ppm (approx. 15 mg/m3) STEL
- Other: Not applicable

Hexylene glycol (107-41-5)
- ACGIH TLV: TWA no data available
- ACGIH TLV: STEL no data available
- OSHA PEL: TWA no data available
- NIOSH: TWA no data available
- NIOSH: STEL no data available
- Other: not applicable

Sodium hydroxide (1310-73-2)
- ACGIH TLV: 2 mg/m3 Ceiling
- ACGIH TLV: STEL No data available
- OSHA PEL: 2 mg/m3 Ceiling
- OSHA PEL: 2 mg/m3 TWA
- NIOSH: 2 mg/m3 Ceiling
- NIOSH: STEL No data available
- Other: Not applicable

2-Butoxyethanol (111-76-2)
- ACGIH TLV: 20 ppm TWA
- ACGIH TLV: STEL No data available
- OSHA PEL: 50 ppm (240 mg/m3) TWA
- OSHA PEL: 25 ppm (120 mg/m3) TWA TABLE Z-1 Limits for Air Contaminants - 1910.1000
- NIOSH: 5 ppm (24 mg/m3) TWA
- NIOSH: STEL No data available
- Other: Not applicable

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear pale yellow

Physical State:	Liquid	**Odor:**	Mild
Odor Threshold:	No data available.	**Solubility:**	Complete
Spec Grav./Density:	1.093	**Freezing/Melting Pt.:**	No data available.
Viscosity:	No data available	**Flash Point:**	>200 F (TCC)
Boiling Point:	No data available.	**Octanol:**	No data available.
Flammability:	Non-flammable	**Vapor Density:**	No data available.
Vapor Pressure:	No data available.	**VOC:**	1.3 lbs/gal, 156 g/l, 15%
pH:	14	**Bulk Density:**	9.12 lbs/gal
Evap. Rate:	No data available.	**Auto-Ignition Temp:**	No data available.
Decomp Temp:	No data available.	**UFL/LFL:**	No data available.

10 STABILITY AND REACTIVITY

Reactivity: Material does not pose a significant reactivity hazard.
Chemical Stability: Product is stable under normal temperature and pressure (25C; 1 atm).
Conditions to Avoid: Concentrated Acids. Incompatible Materials. Heat, sparks, open flames
Materials to Avoid: (Incompatible Materials): Strong Acids; Strong Oxidizing Agents. Open Flames. Aluminum;
Hazardous Decomposition: Carbon Monoxide/Dioxide. Oxides of nitrogen.
Hazardous Polymerization: (Hazardous Reactions): Will not occur.

11 TOXICOLOGICAL INFORMATION

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

Symptoms:
Inhalation: Causes respiratory irritation. Dust or mists may irritate nose, mouth, throat, respiratory tract.

Eye Contact: May cause severe eye irritation, which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Mists/Vapors may cause irritation experienced as mild discomfort and redness.

Skin Contact: May cause severe burns. May cause pain, severe local redness and tissue damage.

Ingestion: May cause burns or irritation of the linings of the mouth, throat, and gastrointestinal tract. May cause nausea, vomiting, and diarrhea.

Acute Toxicity:
Oral: Ethanolamine (141-43-5): LD50 - rat - 1,720 mg/kg
Hexylene glycol (107-41-5): LD50 - rat - 3,700 mg/kg
Sodium hydroxide (1310-73-2): LD50 no data available
2-Butoxyethanol (111-76-2): LD50 - rat - 470 mg/kg

Dermal: Ethanolamine (141-43-5): LD50 - rabbit - 1,015 mg/kg
Hexylene glycol (107-41-5): LD50 - rabbit - 7,892 mg/kg
Sodium hydroxide (1310-73-2): LD50 no data available
2-Butoxyethanol (111-76-2): LD50 - rabbit - 220 mg/kg

Inhalation: Ethanolamine (141-43-5): No data available
Hexylene glycol (107-41-5): LC50 no data available
Sodium hydroxide (1310-73-2): LC50 no data available
2-Butoxyethanol (111-76-2): LC50 - rat - 4 h - 450 ppm

Skin Corrosion: Causes skin irritation

Serious Eye Damage/ Eye Irritation: Causes eye irritation

Sensitization: No data available

Germ Cell Mutagenicity: No data available

Carcinogenicity: This product is or contains a component that is not classifiable as to its carcinogenicity based on its: IARC, ACGIH, NTP, or EPA classification.

Reproductive/ Developmental Toxicity: no data available

Specific Target Organ Toxicity:
Single Exposure: May cause drowsiness or dizziness

Repeated Exposure: No data available

Aspiration Hazard: No data available

12 ECOLOGICAL INFORMATION

Component data:
Ethanolamine (141-43-5)
Toxicity:
fish LC50 - Pimephales promelas (fathead minnow) - 227 mg/l - 96 h.
daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 65 mg/l - 48 h.
algae EC50 - Desmodesmus subspicatus (green algae) - 15 mg/l - 72 h.

Hexylene glycol (107-41-5)
Toxicity:
fish LC50 - Pimephales promelas (fathead minnow) - 10,700 mg/l - 96 h.
daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 3,200 mg/l - 48 h.

Sodium hydroxide (1310-73-2)
Toxicity:
fish LC50 - Gambusia affinis (Mosquito fish) - 125 mg/l - 96 h.
LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h
daphnia and other aquatic invertebrates Immobilization EC50 - Daphnia - 40.38 mg/l - 48 h.

2-Butoxyethanol (111-76-2)
Toxicity:
fish LC50 - other fish - 220 mg/l - 96 h.
daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 1,815 mg/l - 24 h.
Ratio BOD/ThBOD 88 %

Product Data:
Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

13 DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14 TRANSPORT INFORMATION

UN1760, Corrosive liquids, n.o.s., (SODIUM HYDROXIDE, ETHANOLAMINE), 8, PG II
IATA: UN1760, CORROSIVE LIQUIDS, N.O.S.(SODIUM HYDROXIDE, ETHANOLAMINE), 8, II, 855

15 REGULATORY INFORMATION

[%] RQ (CAS#) Substance - Reg Codes

[10-30%] Ethanolamine (141-43-5) HAP, MASS, OSHAWAC, PA, TSCA, TSCAACTV, TXAIR

[10-30%] Hexylene glycol (107-41-5) MASS, OSHAWAC, PA, TSCA, TSCAACTV, TXAIR

[10-20%] RQ(1000LBS), Sodium hydroxide (1310-73-2) CERCLA, CSWHS, MASS, OSHAWAC, PA, TSCA, TSCAACTV, TXAIR

[1-5%] 2-Butoxyethanol (111-76-2) HAP, MASS, OSHAWAC, PA, TSCA, TSCAACTV, TXAIR

WARNING

This product can expose you to chemicals including Nitrilotriacetic acid, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Regulatory Code Legend

RQ = Reportable Quantity
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TSCAACTV = TSCA Active Chemicals

TXAIR = TX Air Contaminants with Health Effects Screening Level
CERCLA = Superfund clean up substance
CSWHS = Clean Water Act Hazardous substances

16 OTHER INFORMATION

This document was composed and approved by qualified RBP Chemical Technology Inc. personnel. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Individuals should make a determination as to the suitability of the information for their particular purpose(s). The above information is not claiming characteristics of the product in terms of legal claims of performance / guarantee. This information only describes safety measures and no liability may arise from the use or application of the product described herein. This information is given in good faith and based on our current knowledge of the product.

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