

ColorLine™/Unisub™ Aluminum
Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Rowmark, Inc.
2040 Industrial Drive
Findlay, OH 45840
USA

EMERGENCY PHONE NUMBERS:
Medical: 911
Poison Control: 800-589-3897

<u>Telephone Numbers</u>	<u>Phone Number</u>	<u>Available Hours</u>
Rowmark Customer Service	1-877-ROWMARK	7:00am-5:00pm EST
International	419-425-8974	

Product Name: ColorLine™/Unisub™ Aluminum
Product Synonym(s): Aluminum Unisub
Chemical Family: Metal Alloy
Chemical Formula:
Chemical Name: Aluminum Alloy
EPA Reg Number:
Product Use: Promotional sublimation item

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>CAS Registry Number</u>	<u>Typical Wt. %</u>	<u>OSHA</u>
Aluminum	7429-90-3	95	Y
Manganese	7439-96-5	1.7	Y
Zinc	7440-66-6	1.7	Y
Magnesium	7439-95-4	1.5	Y
Chromium	7440-47-3	0.2	Y

The substance(s) marked with a "Y" in the OSHA column are identified as hazardous chemicals according to the criteria of the OSHA Hazardous Communication Standard (29 CFR 1910.1200).

While this material is not classified as hazardous under Federal OSHA regulations, this MSDS contains valuable information critical to the safe handling and proper use of this product. This MSDS should be retained and available for employees and other users of this product.

The following information are potential hazards made in the sublimation process. These materials were detected in worse case scenario. in an un-vented room. The following materials were detected in ppb quantities, much less than 1 ppm (1 ppm=1,000 ppb)

<u>Ingredient Name</u>	<u>CAS Registry Number</u>
1,3 Dichloropropene	542-75-6
Acetone	67-64-1
Chlorobenzene	108-90-7
Ethyl Methacrylate	97-63-2
Hexachlorobutadiene	87-68-3
Isopropyl Benzene	98-82-8
n-Propylbenzene	103-65-1
Butylbenzene	98-06-6
Toluene	108-88-3
Trichlorofluoromethane	75-69-4
Xylene	1330-20-7

3. HAZARDS IDENTIFICATION

Emergency Overview:

APPEARANCE: Various colors; Characteristic odor

Potential Health Effects:

EYE: Solid or dust may cause irritation or corneal injury due to mechanical action.

SKIN: Essentially non-irritating to the skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns. No adverse effects anticipated by skin absorption.

INGESTION: Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

INHALATION: Dust may cause irritation to upper respiratory tract (nose and throat).

4. FIRST AID MEASURES

IF IN EYES: Flush eyes with plenty of water; remove contact lenses after the first 1-2 minutes then continue flushing for several minutes. Only mechanical effects expected.

IN CASE OF CONTACT: If molten material comes in contact with the skin, do not apply ice but cool under ice water or running stream of water. DO NOT attempt to remove the material from skin. Removal could result in severe tissue damage.

IF INHALED: Move person to fresh air; if effects occur, consult a physician.

5. FIRE FIGHTING MEASURES

Fire and Explosive Properties

Auto-Ignition Temperature: Aluminum dust may burn readily

Flash Point: N/A

Flammable Limits: Upper: N/A

Lower: N/A

EXTINGUISHING MEDIA:

Use Extinguisher Media **Class D** for dust and water spray for chip fires. DO NOT USE Halogenated Agents.

FIRE FIGHTING INSTRUCTIONS:

Fire fighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand NIOSH approved or equivalent). Fire fighting equipment should be thoroughly decontaminated after use.

FIRE AND EXPLOSION HAZARDS:

Dust dispersion in air can be explosive and can generate explosive gases if in contact with water.

6. ACCIDENTAL RELEASE MEASURES

PROTECT PEOPLE: Chips or dust may present a slipping hazard. Do not allow build up of chips, dust or contact of chips, dust with water

CLEANUP: Sweep up chips or dust in a waste disposal container.

7. HANDLING AND STORAGE

HANDLING: Good housekeeping and controlling dusts are necessary for safe handling of product. Workers should be protected from the possibility of contact with molten resin during fabrication. Large masses of molten polymer held at elevated temperatures for extended periods of time may auto-ignite. Dust is a fire hazard

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS: Adequate ventilation in work area is needed due to dust or vapors created during fabrication.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE/FACE PROTECTION: Safety glasses or face shield should be used. If exposed to dust, chemical glasses may be required.

SKIN PROTECTION: No precautions other than clean body-covering clothing should be needed. Use insulated gloves for thermal protection, when desired.

RESPIRATORY PROTECTION: In dusty atmospheres, use an approved respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/ODOR: Various colors, Sublimation or Engraving process can create a characteristic odor

BOILING POINT: N/A

VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

INCOMPATIBILITY: Reacts violently with halogenated hydrocarbons and oxidizers to produce heat. Small particles can react with water

CONDITIONS TO AVOID: Don not allow build up of chips, dust or contact of chips, dust with water

11. TOXICOLOGY INFORMATION

No data available

12. ECOLOGICAL INFORMATION

MOVEMENT & PARTITIONING: In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

DEGRADATION & PERSISTENCE: This water insoluble polymeric solid is expected to be inert in the environment. Surface photo degradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

ECOTOXICITY: Not expected to be acutely toxic, but chips may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

13. DISPOSAL CONSIDERATIONS

Disposal must be in accordance with applicable governmental regulations.

14. TRANSPORT INFORMATION

No data available

15. REGULATORY INFORMATION

(Not meant to be all-inclusive – selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

No data available

CANADIAN REGULATIONS

No data available

16. OTHER INFORMATION

NFPA HAZARD RATING (National Fire Protection Association):

Fire	1	0	Reactivity	0
Health	0	–	Special	

FIRE: Materials that must be preheated before ignition can occur.
HEALTH: Materials that under emergency conditions would offer no hazard beyond that of ordinary combustible materials.
REACTIVITY: Materials that in themselves are normally stable, even under fire exposure conditions.

The actual sublimation process emits extremely small amounts of 1,3 Dichloropropane, Acetone, Chlorobenzene Ethyl Methacrylate, Hexachlorobutadiene, Isopropyl Benzene, n-Butylbenzene, n-Propylbenzene, Butylbenzene, Toluene, Trichlorofluoromethane, Xylene

REASON FOR ISSUE: