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Product Code: 50005236
MSDS Number: V2100
Revision Number: 3

Version Date: 12/26/2006

Section 1. Chemical, Product and Company Identification

Product Name: VECTRA A130, VJ3009, GREEN

Product Code: 50005236

MSDS Number: V2100

Synonyms: 2-NAPHTHALENECARBOXYLIC ACID, 6-(ACETYLOXY)-,

POLYMER WITH 4-(ACETYLOXY)BENZOIC ACID.

AROMATIC LIQUID CRYSTAL POLYESTER.

Responsible Party: TICONA

8040 DIXIE HWY. FLORENCE, KY 41042 UNITED STATES http://www.ticona.com

Product Use: Engineering thermoplastic.

MSDS Prepared By: O. Schnellenberger (phone 859-372-3186)

Section 2. Composition/Information on Ingredients

Ingredients: Ingredient CAS Number

Base Resin 70679-92-4

This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore, present no likelihood of exposure under normal conditions of

processing and handling.

This product may contain proprietary ingredients.

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

product.

Section 3. Hazards Identification

Emergency Overview: Pellets or chips with slight to no odor. Combustion and decomposition may produce

hazardous fumes. Base resin dust/powder has a US Bureau of Mines relative dust

explosion hazard rating of weak. Molten material can cause thermal burns on contact with

skin or eyes. Spilled pellets may create a slipping hazard.

Potential Health Effects:

Routes of Exposure: Skin and eye contact; inhalation of vapors, if overheated.

Signs and Symptoms of

Exposure:

No specific information available.

Immediate Effects:

Skin: No specific information available on the product. Hot or molten material has the potential

Transportation Emergency (800)424-9300 CHEMTREC - 24 hrs in USA

(703)527-3887 Outside USA

Product Emergency: (888)522-7816 Ticona - 24 hrs/day, toll free in the USA and Canada.



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to cause thermal burns. Polymer particles can cause mechanical irritation.

Eyes: No specific information available on the product. Polymer particles can cause mechanical

irritation. Degradation vapors may cause irritation.

Inhalation: No specific information available on the product. In the form supplied, this material is not

considered an inhalation hazard; polymer particles may be considered an inert nuisance particulate. Overheating in processing may generate hazardous, irritating vapors.

Ingestion: No specific information available on the product, however, low toxicity by this route is

expected based on the biological activity of the base resin.

Long Term/Delayed Effects: No specific information available.

Carcinogenicity: No specific information available on the product.

Medical Conditions Aggravated by Exposure: No specific information available on the product. Off-gases, which may be released if

overheated, may affect those with chronic diseases of the respiratory system.

Section 4. First Aid Measures

Skin: If hot or molten polymer or hot vapors contact skin, cool rapidly with cold water. If

polymer is stuck to skin, do not remove. Seek medical attention. Allow adhered polymer to come off naturally. Removal of adhered polymer may result in more tissue damage than

if polymer is allowed to come off over time.

Eyes: Flush with plenty of water. Seek medical attention if discomfort persists, and to remove

foreign body.

Inhalation: Remove to fresh air. Seek medical attention if breathing difficulties occur.

Ingestion: If a significant quantity has been swallowed, give two glasses of water to dilute. Seek

medical attention.

Note to Physicians: This product is essentially inert and nontoxic. However, if it is heated at too high a

temperature or if it is burned, gases may be released (see Sections 5 and 10 for off-gases). Patients who have been exposed to off-gases may need to have their arterial blood gases and carboxyhemoglobin levels checked. If the carboxyhemoglobin levels are normal, asphyxia (carbon dioxide replacing oxygen) is a possibility. As with any fire, irritant gases may have formed. If patients may have inhaled high concentrations of irritating fumes,

they should be monitored for delayed onset pulmonary edema.

Section 5. Fire Fighting Measures

Flashpoint: > 93 deg C (>200 deg F) by Tag Closed Cup Method.

Autoignition: $540 \deg C (1004 \deg F)$

Base resin dust/powder has a US Bureau of Mines relative dust explosion hazard rating of

weak.

Hazardous Products of

Combustion:

Carbon monoxide and carbon dioxide.

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Product Information: (800)833-4882



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Extinguishing Media: Water spray, foam, carbon dioxide, or dry chemical.

Firefighting Instructions: Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out

gear (bunker gear). Keep personnel removed from and upwind of fire. Water should be used to keep fire-exposed containers cool. Water, foam and dry chemical may cause

damage to electrical equipment.

Section 6. Accidental Release Measures

*For more information, see regulatory section 15.

Leak:

Procedures in Case of Spill or Sweep or gather up spills and place in proper container for recovery or disposal. Ticona

supports SPI's Operation Clean Sweep.

Section 7. Handling and Storage

Handling: Do not handle hot or molten material without appropriate protective equipment. Maintain

> good housekeeping in work areas. Do not exceed recommended process temperatures to minimize release of decomposition products. Do not smoke in areas where polymer dust is present. Appropriate measures should be taken to control the generation and accumulation

of dust during conveying and processing operations.

Storage: Store in a cool dry place. Maintain dryness of resin.

Section 8. Exposure Controls/Personal Protection

Engineering Controls: Local Exhaust: Recommended when appropriate to control employee exposure to dust or

process vapors.

General: May not be adequate as the sole means to control employee exposure.

Protective Equipment:

Skin: When thermal or melt processing, wear long pants, long sleeves, well insulated gloves, and

face shield when there is a chance of contact.

Eves: Safety evewear recommended.

Inhalation: A NIOSH approved respirator is recommended if there is a possibility of dust generation

above permissible exposure limits or that decomposition vapors may be generated.

Exposure Guidelines: Any glass particles in this product are wetted by the polymer system. Residual glass (<1%)

> may be present and cause mechanical eye, skin and respiratory irritation. Operations involving grinding and machining of parts should be reviewed to assure that particulate

levels are kept below recommended standards. See the exposure limits below.

Ingredient: Agency: Value:

OSHA PEL Nuisance/inert dust TWA: 15 mg/cu m (total)

5 mg/cu m (respirable) ACGIH TLV TWA: 10 mg/cu m (total) Nuisance particulates

3 mg/cu m (respirable)

Ticona recommends the ACGIH Limit.

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Section 9. Physical and Chemical Properties

Appearance: Pellets

Odor: Slight characteristic odor

Physical State: Solid

Vapor Pressure: < 0.001 mm Hg

Melting Point: 275 - 335 deg C (527 - 635 deg F)Solubility: Negligible < 0.1% (in water)

Specific Gravity: 1.37 - 2.1

Percent Volatiles: < 1.0 by weight Molecular Weight: > 20,000 (base resin)

Section 10. Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid: Flame; do not heat above 662 deg F (350 deg C). Avoid prolonged exposure to

temperatures above 644 deg F (340 deg C).

Incompatibility: Contact with strong alkali solutions may soften the material.

Hazardous Decomposition

Products:

Phenol, phenyl esters, acetic acid and aromatic compounds.

Hazardous Polymerization: Will not occur.

Section 11. Toxicological Information

Oral LD50: Not available for product. Base resin LD50 > 5 g/kg (rat).

Dermal LD50: Not available for product. Base resin LD50 > 2 g/kg (rat). No irritation or sensitization observed in lab animal or human patch tests for base resin.

Inhalation LC50: Not applicable.

Inhalation of carbon black, a possible ingredient, has been shown to cause lung tumors in rats at high exposure concentrations. These concentrations appear to exceed the capacity of the lung to clear the carbon black particles, thus resulting in significant toxicity.

Tests on the base resin showed that polymer and water extracts are not active in the Ames Test.

Section 12 Ecological Information

Ecotoxicity: The effects of resin pellets on the wildlife that may ingest them is not well understood. In

the case of seabirds, some marine biologists believe that the fowl may not be able to pass plastic pellets through their digestive tracts. Thus, large quantities of ingested pellets may cause intestinal blockage, false feelings of satiation or reduction in absorption of nutrients, causing malnutrition and starvation. The goal of SPI's Operation Clean Sweep is zero loss

of pellets into the environment.

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Environmental Fate/Information:

This material is considered to be non-biodegradable.

Section 13. Disposal Considerations

Disposal: Recycling is encouraged. Dispose of in accordance with federal, state, and local

regulations. This product, as shipped, is not a RCRA hazardous waste under present EPA

regulations.

Section 14. Transport Information

Not regulated under US Department of Transportation, IMDG, or IATA

Section 15. Regulatory Information

TSCA: All ingredients are listed in the TSCA Inventory or are compliant with the TSCA Polymer

Exemption Rule.

SARA: This product may contain the following chemical(s) subject to the reporting requirements

of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372. For more specific information please contact the Ticona Product

Stewardship Department.

Name: CAS Number: Weight %:

Barium Compounds 0 - 20

Chromium 0 - 30

Compounds(not hexavalent)

Cobalt Compounds 0 - 30

Other: For information regarding regulations not listed please contact Ticona Product Stewardship.

Section 16. Other Information

Hazard Ratings:	Agency	Health	Flammability	Physical Hazard	Other
	NFPA	1	1	0	

HMIS 0 1 0

Note 1: NFPA and HMIS ratings are as determined by Ticona.

Note 2: Revisions in this version include Sections 3 and 8.

Disclaimer: This product is not intended for use in medical or dental implants.

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Refer to the appropriate Ticona bulletins for specific processing guidance and good manufacturing practices (purging, processing parameters, shutdown, etc.).

The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Ticona makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.



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