

MATERIAL SAFETY DATA SHEET • MSDS



SECTION I • PRODUCT IDENTIFICATION

TRADE NAME	TECHNOVIT 4004, RESIN
ANAMET PRODUCT NUMBER	235-R

CHEMICAL NAME

MANUFACTURER / SUPPLIER'S NAME
ADDRESS

ANAMET
P.O. Box 538
BOUCHERVILLE, QUÉBEC, J4B 6Y2

TELEPHONE NO.

(450) 646-1290

EMERGENCY TELEPHONE NO.

CANUTEC (613)-996-6666

SECTION II • COMPOSITION / INFORMATION ON COMPONENTS

Chemical characterization Description	CAS number	%	OSHA PEL (mg/m ³)	ACGIH TLV (mg/m ³)
Modified Poly Methyl Methacrylate.	9011-14-7	>99	Not established.	Not established.

SECTION III • PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling point in °C	Not applicable.	Vapor pressure (mm Hg)	Not available.
Melting point in °C	Not established.	Vapor density (Air = 1)	Not available.
Density (Water = 1)	Not available.	Evaporation rate (Butyl acetate= 1)	Not available.
Solubility in water	Insoluble.		
Appearance and odor	White powder, odorless.		

SECTION IV • FIRE / EXPLOSION HAZARD

Flash point	Not applicable.			
Flammable limits	LEL	Not applicable.	UEL	Not applicable
Extinguishing medium	Water, foam, dry chemical, carbon dioxide.			
Special fire fighting procedures	Wear self-contained breathing apparatus.			
Unusual fire and explosion hazards	Toxic fumes of carbon monoxide and carbon dioxide. Material may decompose to form flammable or explosive mixtures in the air.			



SECTION V • REACTIVITY

Stability	Stable at normal temperatures and storage conditions.
Conditions to avoid	Avoid using product in totally unventilated areas.
Incompatibility	Incompatible with strong oxidizing agents and bases.
Hazardous decomposition products	Decomposes with heat. Decomposition temperature 200 °C (392°F). Hazardous gases/vapors produced are carbon monoxide and carbon dioxide. Some organic esters may be generated by decomposing the polymer, these may contain methacrylates.
Hazardous polymerization products	Polymerization will not occur.

SECTION VI • TOXICOLOGICAL PROPERTIES OF PRODUCT

A - SUGGESTED FIRST AID

Eyes	Flush eyes with plenty of water for at least 15 minutes; call a physician.
Skin	Flush skin with water after contact. Wash contaminated clothing before reuse. If molten polymer gets on skin, cool rapidly with cool water. Do not attempt to peel polymer from skin. Obtain medical treatment for thermal burn.
Inhalation	No specific intervention is indicated as compound is not likely to be hazardous by inhalation. Consult a physician if necessary.
Ingestion	Do not initiate vomiting. Consult a physician.

B – TOXICOLOGICAL INFORMATION

PRIMARY ENTRY ROUTES: Inhalation, ingestion, skin, and eye contact.

▼ SHORT TERM EXPOSURE ▼

Eyes	Can be irritating.
Skin	There is no data on the skin irritation or skin sensitization properties of the powder.
Inhalation	Gross overexposure to nuisance particles, regardless of how generated, may cause irritation of the respiratory tract.
Ingestion	There is no information on the ingestion toxicity of the powder. Ingestion is not a probable route of exposure. Toxicity is predicted to be low.

▼ LONG TERM EXPOSURE ▼

Carcinogenicity	None.
Teratogenicity, Mutagenicity and other reproductive effects	None.
Skin Sensitization	Except for skin sensitization, repeated exposures to low molecular weight epoxy resins of this type are not anticipated to cause any significant adverse effects.
Respiratory tract sensitization	Not available.

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Synergistic materials	Not available.
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SECTION VII • PRECAUTIONARY INFORMATION PERSONAL PROTECTIVE MEASURES

Eye, face & hands	Safety glasses. Long sleeve shirt, gloves.
Respiratory protection	Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. A suitable mask with filter type A may be appropriate. In the event of formation of particularly high levels of vapor a self-contained breathing apparatus may be appropriate.
Ventilation	Provide adequate ventilation, including appropriate local extraction, to insure that the defined occupational exposure limit is not exceeded. Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.
Hearing	As needed in accordance with OSHA 1910-215.
HMIS Coding	Health: 0 Flammability: 0 Reactivity: 0

SECTION VIII • SAFETY PRECAUTIONS IN CASE OF LEAKS OR SPILLS

Spill or leak procedure	Vacuum or sweep with sweeping compound, sawdust or sand. Avoid generating dust. Ventilate area and wash spill after the material has been picked up.
Waste disposal	Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, Provincial, and Municipal regulations. Incinerate in a facility which complies with Federal, Provincial and Municipal requirements. Do not incinerate in closed containers.

SECTION IX • STORAGE AND HANDLING

Storage	Keep in a cool, well ventilated place. Preferably not exceeding 25°C.
Handling	Avoid contact with skin and eyes. Avoid inhalation of high concentration of vapors. Use in well ventilated area. Keep container closed to prevent water absorption and contamination.
Shipping classification	<ul style="list-style-type: none"> • Dot Shipping Name: Not regulated. • TDG/UN Shipping Names: Not regulated. • UN Number: Not regulated.
DOT Hazard class	<ul style="list-style-type: none"> • Hazard Class: Not regulated. • Packing Group: Not regulated. • TDG Exemption: Not regulated.

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	<ul style="list-style-type: none">• Label: Not regulated.• IATA Class: Not regulated.• IMDG Class: Not regulated.
HMIS Coding	Health: 0 Flammability: 0 Reactivity: 0

SECTION X • ECOLOGICAL INFORMATION

Environmental fate and Distribution	None listed.
Persistence and Degradation	None listed.
Toxicity	Not toxic.
Effect of effluent treatment	None known.

SECTION XI • REGULATORY INFORMATION

• EC REGULATIONS:

TSCA: On Toxic Substance Control Inventory.
CERCLA Reportable Quantity: None
SARA TITLE III

- Section 302 : None
- Section 311/312: None.
- Section 313: None.

RCRA STATUS: Not regulated.

• CANADIAN REGULATIONS:

WHMIS: Not regulated

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TERMINOLOGY

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

CFR: Code of Federal Regulations (Transportation in U.S.A.)

DOT: Department of Transportation (USA)

DSL: Domestic Substance List

IARC: International Agency for Research and Cancer

LC: Lethal Concentration

LD: Lethal Dosage

MSHA: Mine Safety and Health Administration (USA)

NIOSH: National Institute for Occupational Safety and Health (USA)

NTP: National Toxicology Program (U.S.A.)

OSHA: Occupational Safety and Health Administration (USA)

PEL: Permissible exposure limit.

STEL: Short term exposure limit.

TDG: Transportation of Dangerous Goods

TLV: Threshold limits value.

TSCA: Toxic Substances Control Act

TWA: Time-weighted average

USEPA: United States Environmental Protection Agency

WHMIS: Workplace Hazardous Materials Information System