Safety Data Sheet



VAMAC® ESX 397

Version 2.0

Revision Date 07/25/2017 Ref. 130000148418

This SDS adheres to the standards and regulatory requirements of the United States and may not meet the regulatory requirements in other countries.

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : VAMAC® ESX 397

Product Use : Polymer

Restrictions on use : For manufacturing and research use only

Manufacturer/Supplier : Celanese Sales U.S. Ltd.

222 West Las Colinas Boulevard Suite 900N

Irving, TX 75039

Telephone : 1-800-441-7515 (outside the U.S. +1 972-443-4000 E-mail address: HazCom@c

E-mail address : 1-800-441-3637 (outside the U.S. 1-302-774-1139)

Transport Emergency : Domestic NA: 800-424-9300 International, CALL +1 703-527-3887 (collect calls

SECTION 2. HAZARDS IDENTIFICATION

Not classified as a hazardous substance or mixture according to the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 2012.

Other hazards

During processing fumes may evolve irritating the eyes, nose and throat., Exposure may result in reddening, tears and itching of the eyes and soreness in the nose and throat, together with coughing., Exposure to off gases may cause dermatitis (reddening of the skin)., Irritation

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

This product does not contain any components that require disclosure according to OSHA Hazard Communication Standard 2012.



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SECTION 4. FIRST AID MEASURES

General advice : No applicable data available.

Inhalation : Move to fresh air in case of accidental inhalation of fumes from overheating or

combustion. Get medical attention. Call a physician. If not breathing, give

artificial respiration.

Skin contact : In case of contact, immediately flush eyes or skin with plenty of water for at

least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing before reuse. Cool skin rapidly with cold water after contact with molten material. Do not attempt to remove material from the skin.

Obtain medical treatment for thermal burn.

Eye contact : In case of contact, immediately flush eyes with plenty of water for at least 15

minutes. Call a physician.

: No applicable data available.

Ingestion : Not a probable route of exposure. However, in case of accidental ingestion, call

a physician.

Most important

symptoms/effects, acute

and delayed

Protection of first-aiders : No applicable data available. Notes to physician : No applicable data available.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Water, Foam, Dry chemical, Carbon dioxide (CO2)

Unsuitable extinguishing

media

: No applicable data available.

Specific hazards : Hazardous combustion products Carbon dioxide (CO2) hydrocarbon oxidation

products Alcohols Ketones Aldehydes Esters carboxylic acids Oxides of

phosphorus Acrolein, Phosphonic acid

Special protective equipment

for firefighters

: Wear self-contained breathing apparatus and protective suit.



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Further information : Evacuate personnel and keep upwind of fire. The solid polymer can only be

burned with difficulty.

SECTION 6. ACCIDENTAL RELEASE MEASURES

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Safeguards (Personnel) : No applicable data available.

Environmental precautions : Do not discharge to streams, ponds, lakes or sewers.

Spill Cleanup : Shovel or sweep up.

Accidental Release Measures : No applicable data available.

SECTION 7. HANDLING AND STORAGE

Handling (Personnel) : When opening containers, avoid breathing vapours that may be emanating.

Open container only in well-ventilated area. Do not breathe vapours or fumes that may be evolved during processing. Before using, read the product

bulletin.

Handling (Physical Aspects)

Dust explosion class

Storage

No applicable data available.

No applicable data available.

: Keep containers tightly closed in a cool, well-ventilated place. Storage of

multiple pallets in unventilated area may cause acrylate concentrations to

exceed specified limits.

Storage period : No applicable data available.

Storage temperature : No applicable data available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls : When hot processing this material, use local and/or general exhaust

ventilation to maintain the concentration of vapors and fumes below exposure limits. Local exhaust ventilation is preferred. See Bulletin "Proper Use of Local Exhaust Ventilation During Processing of Plastics". Use sufficient ventilation to keep employee exposure below recommended limits.



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Personal protective equipment

Respiratory protection : A respiratory protection program that meets country requirements must be

followed whenever workplace conditions warrant respirator use. Consult the respirator manufacturer to determine the appropriate type of equipment for a

given application. Observe respirator use limitations specified by the manufacturer.

Consult the OSHA respiratory protection information located at 29CFR

1910.134.

Hand protection : Material: Protective gloves

Eye protection : Wear safety glasses with side shields. Wear tightly fitting chemical splash

goggles and face shield when possibility exists for eye and face contact due

to spattering or splashing of molten material.

Skin and body protection : Where there is potential for skin contact, have available and wear as

appropriate, impervious gloves, apron, pants, jacket, hood and boots.

If there is a potential for contact with hot/molten material wear heat resistant

clothing and footwear.

Exposure Guidelines
Exposure Limit Values

This product does not contain any exposure limits that require disclosure according to OSHA Hazard Communication Standard 2012.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state : solid Form : bales

Color : clear, to, light yellow, translucent

Odor : acrylic-like

Odor threshold : 0.0048 - 20 ppm

Methyl acrylate

pH : No applicable data available.

Melting point/range : No applicable data available.

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Boiling point/boiling range : No applicable data available.

Flash point : ca.212.5 °C (1,016 hPa)

closed cup

Method: Setaflash closed cup - SCC

Evaporation rate : No applicable data available.

Flammability (solid, gas) : No applicable data available.

Upper explosion limit : No applicable data available.

Lower explosion limit : No applicable data available.

Vapour Pressure : No applicable data available.

Vapour density : No applicable data available.

Specific gravity (Relative

density)

> 1

Water solubility : insoluble

Solubility(ies) : No applicable data available.

Partition coefficient: n-

octanol/water

: No applicable data available.

Auto-ignition temperature : No applicable data available.

Decomposition temperature : >282 °C

Thermal decomposition of the resin accelerates above temperature listed.

Decomposition can occur below the recommended processing temperature

limit.

Decomposition is a function of both processing temperature and time at that

temperature.

Viscosity, kinematic : No applicable data available.

Viscosity, dynamic : No applicable data available.



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SECTION 10. STABILITY AND REACTIVITY

Reactivity : Stable at normal ambient temperature and pressure.

Chemical stability : Stable at normal ambient temperature and pressure.

Possibility of hazardous

reactions

: Polymerization will not occur. Large molten masses may give off hazardous

gases. Water quenching is good practice.

Conditions to avoid : Temperature > 282 °C (> 540 °F)

Decomposes on heating.

At temperatures above the "conditions to avoid" temperature, thermal decomposition of the resin accelerates. Decomposition can occur below the recommended processing temperature limit. Decomposition is a function of

both processing temperature and time at that temperature.

Incompatible materials : Strong acids and, Oxidizing agents

Hazardous decomposition

products

: Hazardous decomposition products may include:, Alcohols, Acrolein,

phosphorous oxides, Ketones, Aldehydes, Esters, Organic acids, Carboxylic

acid, Acrylic acid, Maleic anhydride, Formaldehyde, acetaldehydes,

Phosphonic acid

SECTION 11. TOXICOLOGICAL INFORMATION

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Further information : No data is available on the product itself.

Carcinogenicity

The carcinogenicity classifications for this product and/or its ingredients have been determined according to HazCom 2012, Appendix A.6. The classifications may differ from those listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or those found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition).

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen.

SECTION 12. ECOLOGICAL INFORMATION



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Additional ecological information : There is no data available for this product. Toxicity is expected to be

low based on insolubility in water.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods -

Product

: Preferred options for disposal are recycling, incineration with energy recovery, and landfill. The high fuel value of this product makes incineration very desirable for material that cannot be recycled. Treatment, storage,

transportation, and disposal must be in accordance with applicable federal,

state/provincial, and local regulations.

Contaminated packaging : No applicable data available.

SECTION 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

SECTION 15. REGULATORY INFORMATION

TSCA : In compliance with TSCA Inventory requirements for commercial purposes.

SARA 313 Regulated

Chemical(s)

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established

by SARA Title III, Section 313.

PA Right to Know

Regulated Chemical(s)

: Substances on the Pennsylvania Hazardous Substances List present at a concentration of 1% or more (0.01% for Special Hazardous Substances):

None known.

NJ Right to Know

Regulated Chemical(s)

: Substances on the New Jersey Workplace Hazardous Substance List present

at a concentration of 1% or more (0.1% for substances identified as

carcinogens, mutagens or teratogens): None known.

California Prop. 65 : WARNING! This product contains a chemical or chemicals known to the State

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of California to cause cancer.

WARNING! This product contains a chemical known to the State of California

to cause birth defects or other reproductive harm.

SECTION 16. OTHER INFORMATION

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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