

MATERIAL SAFETY DATA SHEET

22 November 2013

I PRODUCT AND COMPANY INFORMATION

Product Name	TECNADIS METALCOAT EASY TO CLEAN - Base Coat
Company	Tecnología Navarra de Nanoproductos, TECNAN S. L. Perguita Industrial Zone, C/A No.1 31210 Los Arcos (Navarre) SPAIN
Phone	(+34) 948 64 03 18
Fax	(+34) 948 64 03 19
e-mail address	tecnan@tecnan-nanomat.es

II HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Hazard indicators: Highly flammable
 Acute toxicity

GHS Classification:

Hazard category: Flammable liquid (Category 3)
 Acute toxicity by inhalation (Category 4)

Hazard indications: Highly flammable liquid and vapours.
 Harmful if inhaled.

Label elements: Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictograms: GHS02 / GHS07



Signal word: Danger / Caution

Hazard statement(s):

H225	Highly flammable liquid and vapours.
H332	Harmful if inhaled
H319	Causes serious eye irritation
H335	May cause respiratory irritation

Precautionary statement(s):

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P235	Store in a well ventilated place. Keep cool.
P501	Dispose of contents/container according to applicable legislation.

III COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Product Name	Conc. (% w/w)	CAS #	EC no	Clasification
Active Components	35 - 45 %			H226, H332, H319, H335, H315, P210, P261, P305+P351+P338.
Ethanol	> 50 %	[64-17-5]	200-578-6	H225, P210, P243, P303+P361+P353, P403+P235, P501.

IV FIRST AID MEASURES

<u>After inhalation:</u>	Remove from exposure and move to fresh air. If not breathing give artificial respiration. Get medical aid.
<u>After skin contact:</u>	Wash off with soap and plenty of water. Get medical aid.
<u>After eye contact:</u>	Flush eyes with plenty of water for at least 15 minutes. Get medical aid.
<u>After ingestion:</u>	Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash mouth out with water. Get medical aid.

V FIRE FIGHTING MEASURES

Protective equipment	Wear self contained breathing apparatus for fire fighting if necessary.
Extinguishing media	For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.
Specific hazards	Carbon monoxide and carbon dioxide may be generated from the combustion of the substance or mixture.

VI ACCIDENTAL RELEASE MEASURES

Provide maximum ventilation. Remove sources of ignition. Dike area to contain spill. Wear proper protective equipment. Recover spilled material on adsorbents, such as sand or vermiculite, and place in

covered containers for reclamation or disposal. After all visible liquid has been removed, wash area of spill with plenty of soap and water and maintain ventilation until all vapors are eliminated. If area of spill is porous, remove as much earth and gravel, etc. as necessary and place in closed containers for disposal.

VII HANDLING AND STORAGE

Handling	Use with adequate ventilation. Wear appropriate personal protective equipment when handling this product. Keep away from heat, sparks, flames, direct sunlight, and other sources of heat, as well as from strong acids or oxidizing agents.
Storage	Store in a cool, dry, well-ventilated place. Store only in closed, properly labeled containers. Keep container closed when not in use. Keep away from heat, sparks, flames, direct sunlight, and other sources of heat, as well as from strong acids or oxidizing agents.

VIII EXPOSURE CONTROL / PERSONAL PROTECTION

Respiratory protection	Overexposure to vapors may be prevented by ensuring proper ventilation controls, vapor exhaust or fresh air entry. A NIOSH-approved air purifying respirator with the appropriate chemical cartridges or a positive-pressure air-supplied respirator may also reduce exposure. Read the respirator manufacturer's instructions and literature carefully to determine the type of airborne contaminants against which the respirator is effective, its limitations, and how it is to be properly fitted and used.
Ventilation	Use local exhaust or general room/dilution ventilation as appropriate to control employee exposures in the work place.
Eye and face protection	Chemical safety goggles.
Protective gloves	Neoprene or nitrile gloves. No specific permeation/degradation testing have been done on protective clothing for this product. Recommendations for skin protection are based on glove testing for materials with similar chemical structure.
Other equipment	Boots, aprons, or chemical suits should be used when necessary to prevent skin contact.

IX PHYSICAL AND CHEMICAL PROPERTIES

<u>Property</u>	<u>Value</u>
State:	Liquid
Colour:	Colourless
Odour:	Alcoholic
Water solubility:	Soluble
Density:	0.899 g/cm ³
Viscosity:	8-10 cp
Boiling point:	78 °C
Flash point:	9 °C (closed cup)
pH:	1.5-2
Vapor pressure:	59.5 hPa (20 °C)

X STABILITY AND REACTIVITY

Chemical stability:	Stable over normal use conditions. Test data related to the specific chemical stability of the product and its components is not available.
Incompatibility (conditions/materials to avoid):	Oxidizing agents. Avoid heat, flames and sparks. Upon contact with water, active ingredients may deactivate.
Hazardous decomposition products:	Carbon monoxide. Carbon dioxide. Methanol. Silicon dioxide.
Hazardous polymerization:	Will not occur.

XI TOXICOLOGICAL INFORMATION

Acute overexposure:	LD50 Oral - rat - 3,160 mg/kg LD50 Dermal - rabbit - 5,878 mg/kg
Chronic overexposure:	The effects of long-term, low level exposures to this product have not been determined. Safe handling of this material should emphasize the prevention of all contact with this material to avoid any effects from repetitive acute exposures.
Carcinogenicity status:	This product is not listed as a carcinogen or suspected carcinogen by NTP, IARC, ACGIH, or OSHA.
Potential health effects:	Harmful if inhaled. May cause skin and eye irritation. Vapours may cause drowsiness and dizziness. Harmful if swallowed.

XII ECOLOGICAL INFORMATION

Elimination information:	No data available
Ecotoxicity effects:	No data available
Bioaccumulation potential:	The product is volatile and remains in atmospheric phase.
Soil mobility:	If spilled in soil, it evaporates rapidly.
Further information on ecology:	Avoid pouring in water. It slightly contaminates water.

XIII DISPOSAL CONSIDERATIONS

Substance disposal	Dispose of in a manner consistent with local and/or international regulations. Empty containers should be recycled or disposed of through an approved waste management facility.
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XIV TRANSPORT INFORMATION

RID/ADR	UN-Number: 1170 Class: 3 Packing group: II Proper shipping name: ETHANOL SOLUTION Transport Considerations: CONTAINER VOLUMES OF UP TO 1 LITTER ARE EXEMPT BY LQ
IMDG	UN-Number: 1170 Class: 3 Packing group: II EMS-No: F-E, S-D Proper shipping name: ETHANOL SOLUTION Marine pollutant: No Transport Considerations: CONTAINER VOLUMES OF UP TO 1 LITTER ARE EXEMPT BY LQ
IATA	UN-Number: 1170 Class: 3 Packing group: II Proper shipping name: ETHANOL SOLUTION Transport Considerations: CONTAINER VOLUMES OF UP TO 1 LITTER ARE EXEMPT BY LQ

XV REGULATORY INFORMATION

Pictograms:

GHS02	Highly flammable
GHS07	Acute toxicity

Full text of Hazard (H) and Precautionary (P) statements:

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XVI OTHER INFORMATION

Warranty	The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. TECNAN S. L. shall not be held liable for any damage resulting from handling or from contact with the above product or packing slip for additional terms and conditions of sale. Copyright 2013 TECNAN S. L. License granted to make unlimited paper copies for internal use only.
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