


## MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 of the European Parliament and of the Council

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

<b>1.1 Identification of the substance or preparation</b>	<u>Temp Seal</u> (product code: Tempseal)
<b>1.2 Use of the substance/preparation:</b>	Die hardener or sealant
<b>1.3 Company/undertaking identification:</b>	Micerium S.p.A. Via G. Marconi 83 16036 Avegno (GE) –Italy Phone: +39. 0185. 7887870 fax +39. 0185. 7887970
<b>1.4 Emergency telephone:</b>	Poison Control Center San Martino Hospital (Genova, Italy) Phone: +39 010 352808 (available 24 hours/ 24)

### 2. HAZARDS IDENTIFICATION

<b>Most important hazards:</b>	Exposure to heat above 200°C may release the following monomer: Methyl Methacrylate** (Number CAS 80-62-6; OSHA/PEL e ACGIH/TLV:100ppm – please see Sec. 15)
<b>Physical – chemical hazards:</b>	 <b>F</b> flammable
<b>Hazards for human health:</b>	
<b>Eyes:</b>	Direct contact may cause irritation and temporary damage. May cause conjunctivitis.
<b>Skin:</b>	Prolonged or repeated contact can cause irritation.
<b>Inhalation:</b>	Solvent vapours may cause headache, nausea, dizziness and irritation of the nose and bronchial passages.
<b>Ingestion:</b>	Do not induce vomiting. Call a physician immediately and/or transport to medical facility.
<b>Over-exposure signs and symptoms:</b>	Skin irritation.
<b>Chronic effects:</b>	No adverse effects anticipated from available information
<b>Hazards for environment:</b>	None

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>3.1 Main ingredients:</b>	Solvent Solution –Polymer Coating
<b>3.2 Dangerous ingredients:</b>	

Common name for the compound	CAS-number	Content	Frases R*
Methyl Ethyl Ketone	78-93-3	70-100%	
Acrylic Resin	25086-15-1	10-25%	

\* full text of R and S-Phrases can be found under heading 16

### 4. FIRST AID MEASURES

<b>Immediate medical attention need:</b>	If inhalation and digestion.
<b>Measure to be adopted when:</b>	
- <b>It contacts eyes:</b>	Immediately flush eye with copious amounts of water for 15 minutes. If irritation persists, seek medical attention.
- <b>It contacts skin:</b>	Irritation upon direct contact. Remove contaminated clothing and wash affected areas with soap and water.
- <b>Inhaled:</b>	Remove to fresh air. Perform artificial respiration if breathing is difficult. Obtain immediate medical attention.
- <b>Ingested:</b>	Do not induce vomiting. Do not give anything to drink, Get immediate medical attention.

**Medical Conditions generally Aggravated by Expose:  
Note to Physician:**

Pre-existing skin disorders. Inhalation of material may aggravate asthma/inflammatory pulmonary disease.  
There is no specific antidote, Treatment directed to control of symptoms. Aspirated material during vomiting may cause lung injury, therefore, gastric lavage after endo- racheal intubation most likely procedure, if necessary.

**5. FIRE-FIGHTING MEASURES**

<b>General information:</b>	Flammable liquid
<b>Suitable extinguishing media:</b>	Foam; Water spray; foam or Carbon dioxide.
<b>Extinguishing media which shall not be used for safety reasons:</b>	NA
<b>Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases:</b>	Vapours may travel distances to ignition sources and flash back explosively. This material may produce a floating fire hazard.
<b>Special protective equipment for fire-fighters:</b>	Use water spray to cool fire-exposed containers, disperse vapors. Re-ignition is possible. Use self-contained breathing apparatus and protective clothing which should include Full MSHA/NIOSH Approved Protective Equipment.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal precautions:</b>	Avoid direct contact with eyes/skin. Wear protective safety equipment as necessary to minimize contact. Wash hands with soap and water and launder contaminated clothing.
<b>Environmental precautions:</b>	Avoid heat, sparks and flame.
<b>Measures for cleaning/collecting:</b>	Remove all possible ignition sources. Spills can be contained with non-combustible materials, i.e. sand or earth. Prevent liquid from entering sewers, watercourses, or low areas. Remove contaminated waste material to containers for appropriate disposal. For low quantities: Clean with paper towels and dispose of properly, or remove to out of doors to allow vapours to evaporate. Caution: Floors may become slippery.

**7. HANDLING AND STORAGE**

<b>7.1 Handling:</b>	Flammable. Avoid heat, sparks and flames. Use only with adequate ventilation and avoid direct contact with eyes/skin. Ground all metal containers which transferring liquid. Wash hands thoroughly after handling. Do not smoke when using this material. Keep away from flame or bunsen burner.
<b>7.2 Storage:</b>	Keep containers tightly capped. Keep neck of resin container free of resin build-up to maintain proper seal. Store containers in approved areas for flammables.
<b>7.3 Specific use(s):</b>	Any use of the product in elevated-temperature may be hazardous.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>8.1 Exposure limit values:</b>	Common name for the compound	ACGIH/TLV	OSHA/PEL	STEL
	Methyl Ethyl Ketone	200 ppm	200 ppm	300 ppm
	Acrylic Resin	NA	NA	NA

**8.2 Exposure controls:**

**8.2.1 Occupational exposure controls:**

- 8.2.1.a Respiratory protection:** Respiratory Protection: Use self- contained breath apparatus in high vapour concentrations.
- 8.2.1.b Hand protection:** Butyl gloves and protective clothing to avoid direct contact.
- 8.2.1.c Eye protection:** Safety glasses/goggles
- 8.2.1.d Skin protection:** Wear protective safety equipment as necessary to minimize contact.

**8.2.2 Environmental exposure controls:**

Ensure a good ventilation. Use mechanical ventilation if necessary.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 General information:

Physical state:	Liquid
Colour:	Water – White
Odour:	Mild.

### 9.2 Important health, safety and environmental information:

pH:	ND	Relative density (H <sub>2</sub> O=1):	0.86
Boiling point/boiling range:	≅ 79°C (175F)	Solubility:	ND
Flash point:	≅ -3.9°C ( 25F -TCC Method)	Water solubility:	Moderately soluble.
Flammability (solid, gas):	Inflammability limits: low 1.4%; high 11.5%	Partition coefficient: n-octanol/water:	ND
Explosive properties:	ND	Viscosity:	ND
Oxidising properties:	ND	Vapour density:	ND
Vapour pressure:	83 a 24°C	Evaporation rate:	6.0 (butyl acetate=1)

### 9.3 Other information:

Miscibility:	ND	Melting point/melting range:	NA
Fat solubility (solvent — oil to be specified):	0%	Gas group:	ND
Conductivity:	ND	Auto-ignition temperature	ND

## 10. STABILITY AND REACTIVITY

10.1 Conditions to avoid:	This products is stable. Condition to avoid: Open flame, weld arcs or other high temperature sources.
10.2 Materials to avoid:	Caustics, amines, alkanolamines, aldehydes, ammonia, strong oxidizing agents and Chlorinated compounds.
10.3 Hazardous decomposition products:	Carbon monoxide/dioxide. See note in Section 2.
10.4 Hazardous Polymerization:	May not occur.

## 11. TOXICOLOGICAL INFORMATION

LD/LC50 values relevant for classification:	ND
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### 11.1 Immediate effects due to:

11.1.1 Skin/ eye contact:	Direct contact may cause eye/ skin irritation.
11.1.2 Inhalation:	At high concentrations causes irritation of respiratory tract with coughing/chest pain and possible loss of consciousness.
11.1.3 Ingestion:	Moderately toxic with irritation of mouth, throat and oesophagus accompanied by nausea, abdominal discomfort, vomiting, diarrhoea, dizziness & drowsiness.

### 11.2 Delayed effects due to:

11.2.1 Skin/ eye contact:	NA
11.2.2 Inhalation:	NA
11.2.3 Ingestion:	NA

### 11.3 Chronic effects due to:

11.3.1 Skin/ eye contact:	NA
11.3.2 Inhalation:	NA

11.3.3 Ingestion:	NA
11.4 Sensitizing effects:	NA
11.5 Carcinogenicity, mutagenicity and reproductive toxicity:	NA
Other toxicological information:	NA

## 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:	ND
12.2 Mobility:	ND
12.3 Persistence and degradability:	ND
12.4 Bioaccumulative potential:	ND
12.5 Results of PBT assessment	ND
12.6 Other adverse effects:	No information available at this time.

## 13. DISPOSAL CONSIDERATIONS

Reccomendation:	For discard, this is a hazardous waste. RCRA #D001. Reportable quantity is 100lbs (40 CFR 302). In accordance with local state, provincial and federal regulations. Incinerate liquid in approved equipment only. For small quantities, allow solvent evaporate in well ventilated areas or outdoors (preferred). Do not dump on the ground or into body of water.
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## 14. TRANSPORT INFORMATION



Packaging group: II UN-Number: 1193 Class III

14.1 By sea (IMDG):	See up.
14.2 By road (ADR):	See up.
14.3 By rail (RID):	See up.
14.4 By Air (ICAO / IATA):	See up.

## 15. REGULATORY INFORMATION

\*\* This ingredient is subject t the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40CFR372

## 16. OTHER INFORMATION

16.1 List of relevant R phrases:	
16.2 Training advice:	NA
16.3 Recommended restrictions on use:	Only for professional use
16.4 Further information:	
16.5 Sources of key data used to compile the Safety Data Sheet:	The data herein dates to the product named and is based upon information that Micerium S.p.A. believes to be reliable and accurate. No warranty expressed or implied is intended. Users of this product have the responsibility to determine the suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. This information is offered solely for your consideration and interpretation.
16.6 Changes from the previous version (if available):	NA
16.7 Released by:	Micerium S.p.A.