

Safety Data Sheet (SDS)

According to Regulation (EC) No 1907/2006 (REACH), Annex II (COMMISSION REGULATION (EU) No 2015/830)

Vacuum Insulation panel

Date of issue: 2021-01-01	Rev	vision date:	1	Version: A01
ECTION 1: IDENTIFICAT	ION OF THE SUBSTANCE/MIX	XTURE ANI	O OF THE COMP	ANY/UNDERTAKING
1.1. Product identifier				
Trade name/designation	: Micolon VIP			
1.2. Relevant identified us	es of the substance or mixture and	d uses advise	d against	
1.2.1. Relevant identified	ises			
- Industrial/ Thermal ins	ulation			
1.2.2. Uses advised agains	;			
- Not available				
1.3. Details of the supplier	•			
Manufacturer/Supplier	:Sichuan Micolon Vacuum New Mat	erials Co,.Ltd		
	:Puguang Micro-fiberglass Industrial 2	Zone, Xuanhan	County, Dazhou City	ζ,
Address	Sichuan Prov., 636150, China			
- Telephone number	86-13913837443			
- Emergency telephone number	86-15923188430			
- Fax number	0818-5619301			
- E-mail address	<u>heyang@micron-vip.com</u>			
1.4. Emergency telephone	number			

1.4. Emergency telephone number

EU-wide emergency number : 112

See section 16.6 for the list of telephone number of poison centers in the European Economic Area.

SECTION 2: HAZARD IDENTIFICATION

2.1. Classification of the substance/mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP] - Not applicable

2.2. Label elements

- 2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]
 - * Hazard Pictogram(s)
 - Not applicable
 - * Signal word : Not applicable
 - * Hazard statement(s)
 - Not applicable
 - * Precautionary statement(s)
 - 1) Prevention
 - Not applicable
 - 2) Response
 - Not applicable
 - 3) Storage
 - Not applicable
 - 4) Disposal
 - Not applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

- Not applicable

3.2. Mixtures

	Name	CAS No.	REACH registration No.	% [weight]	Classification [1272/2008/EC]
Glass, oxide	e	65997-17-3	-	60-95	Note Q is satisfied
Polymer (5-40%)	Poly(oxy-1,2- ethanediyloxycarbo nyl-1,4- phenylenecarbonyl)	25038-59-9	-	2.3-18	Not classified
	Polyethylene	9002-88-4	-	2.1-17	Not classified
	polyurethane	9009-54-5	-	0.58-5	Not classified
	Acetic acid ethenyl ester polymer with ethene and ethenol	26221-27-2	-	0-10	Not classified
	Aluminium	7429-90-5	-	0-10	Water-react 2, H261 Flam. Solid 1, H228 Pyr. Liq. 1, H250
Absorbent	+	1305-78-8	-	0.2-5	Not classified

X No additional substances other than the above substances in this product

X Description : The glass (oxide) is composed of Biosoluble glass wool .

Therefore the glass wool used in the VIP satisfy Note Q in the regulation [1272/2008/EC]

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General

- No general infomation.

Inhalation

- When exposed to large amounts of steam and mist, move to fresh air.
- Take specific treatment if needed.

Skin contact

- Flush skin with plenty of wter for at least 15 minutes while removing contaminated clothing and shoes.
- Laundering enough contaminated clothing before reuse.

Eye contact

- Do not rub your eyes.
- Immediately flush eyes with plenty of water for at least 15minutes and call a doctor/physician.

Ingestion

- About whether I should induce vomiting Take the advice of a doctor.
- Rinse your mouth with water immediately.

4.2. Most important symptoms and effects, both acute and delayed

- Not available

4.3. Indication of any immediate medical attention and special treatment needed

- Notify medical personnel of contaminated situations and have them take appropriate protective measures.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

- Suitable extinguishing media
 - Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

Unsuitable extinguishing media

- Avoid use of water jet for extinguishing

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

- Not available

5.3. Advice for firefighters

- Cool containers with water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Notify your local firestation and inform the location of the fire and characteristics hazard.
- Using a unattended and water devices in case of large fire and leave alone to burn if you do not imperative.
- Avoid inhalation of materials or combustion by-products.
- Keep containers cool with water spray.
- Use fire fighting procedures suitable for surrounding area.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment: Wear proper protective equipment.
- Emergency procedures: Not applicable
- If required, notify relevant authorities according to all applicable regulations.

6.1.2. For emergency responders

- Must work against the wind, let the upwind people to evacuate.
- Remove all sources of ignition.
- Handling the damaged containers or spilled material after wearing protective equipment.

6.2. Environmental precautions

- Prevent runoff and contact with waterways, drains or sewers.

- If large amounts have been spilled, inform the relevant authorities.
- Avoid dispersal of spilt material and runoff and contact with waterways, drains and sewers. If large spills, advise emergency

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

- Don't use a brush or compressed air for cleaning surfaces or clothing.
- No smoking, naked lightsor ignition sources.
- Stop leak if safe to do so.

6.3.2. For cleaning up

- Large spill : Stay upwind and keep out of low areas. Dike for later disposal.
- Notification to central government, local government. When emissions at least of the standard amount
- Dispose of waste in accordance with local regulation.
- Appropriate container for disposal of spilled material collected.
- Small liquid state spills: Appropriate container for disposal of spilled material collected.
- For disposal of spilled material in appropriate containers collected and clear surface.

6.3.3. Other information

- Slippery when spilt.

6.4. Reference to other sections

- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for information on disposal.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

- Thorough dedusting.
- Do not handle until all safety precautions have been read and understood.
- Operators should wear antistatic footwear and clothing.

7.2. Conditions for safe storage, including any incompatibilities

- Store in a dry and sheltered place.
- Do not apply any physical shock to container.

7.3. Specific end use(s)

- See Section 1 for information on 1.2 Relevant identified uses.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

- 8.1.1. Occupational exposure limits
 - European Union (EU) Commission Directive 2006/15/EC (IOELVs)
 - Not available
 - European Union (EU) Commission Directive 2006/15/EC (IOELVs) Skin
 - Not available

8.1.2. Recommended Monitoring Procedures

- Personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

8.1.3. DNEL/PNEC - Values

- Not available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

- A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

8.2.2. Individual protection measures, such as personal protective equipment

Hand protection

- Wear appropriate glove.

Eye protection

- Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.
- Provide an emergency eye wash station and quick drench shower in the immediate work area.

Respiratory Protection

- Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.
- Respiratory protection is ranked in order from minimum to maximum.
- Consider warning properties before use.
- Dust, mist, fume-purifying respiratory protection
- Any air-purifying respirator with a corpuscle filter of high efficiency
- Any respiratory protection with a electromotion fan(for dust, mist, fume-purifying)
- Self-contained breathing apparatus with a corpuscle filter of high efficiency

- For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any selfcontained breathing apparatus with a full facepiece.

Skin protection

- Wear appropriate clothing.

8.2.3 Environmental exposure controls

- Do not let product enter drains. For ecological information refer to section 12.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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Appearance(State)	Panel	
Appearance(Color)	Silver	
Odor	Not available	
Odor threshold	Not available	
pH	Not available	
Melting point/Freezing point	Not available	
Initial boiling point and boiling range	Not available	
Flash point	Not available	

Evaporation rate	Not available		
Flammability(solid, gas)	Not available		
Upper/Lower Flammability or explosive limits	Product does not present an explosion hazard.		
Vapour pressure	Not available		
Vapour density	Not available		
Relative density	250-350 kg/m3 (According to the different thickness of the Core)		
Solubility	Not available		
Partition coefficient of n-octanol/water	Not available		
Autoignition temperature	Not available		
Decomposition temperature	Not available		
Viscosity	Not available		
Explosive properties	Not available		
Oxidising properties	Not available		

9.2. Other information

- Not available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

- Not available

10.2. Chemical Stability

- This material is stable under recommended storage and handling conditions.

10.3. Possibility of hazardous reactions

- Hazardous Polymerization will not occur.

10.4. Conditions to avoid

- Avoid contact with incompatible materials and condition.
- Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces

10.5. Incompatible materials

- Strong acids and bases.

10.6. Hazardous decomposition products

- Not available

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Acute toxicity

- Oral - >5000mg/kg

- $[Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl)]: LD50 > 3200 \ \text{mg/kg Rat}$
- [Polyethylene] : LD50 > 8000 mg/kg Rat (RTECS)
- Dermal ATE MIX : Not available
 - [Poly(oxy-1,2-ethanediyloxycarbonyl-1,4-phenylenecarbonyl)] : LD50 > 1000 mg/kg Guinea pig

- Inhalation - ATE MIX : 5.0mg/L < ATEmix <= 12.5mg/L

- [Polyethylene] : dust LC50 = 9.44 mg/L 4hr (75.5 mg/ℓ 30 min) Rat (RTECS)

11.2. Skin corrosion/irritation

- Not available

11.3. Serious eye damage/irritation

- Not available

11.4. Respiratory sensitization

- Not available

11.5. Skin sensitization

- Not available

11.6. Germ cell mutagenicity

- Not available

11.7. Carcinogenicity

- IARC

- [Polyethylene] : Group 3
- [polyurethane] : Group 3
- OSHA
 - Not available
- ACGIH
 - [Aluminium] : A4 (Aluminum metal and isoluble compounds)
- NTP
 - Not available
- EU CLP
 - Not available

11.8. Reproductive toxicity

- Not available

11.9. Specific target organ toxicity(single exposure):

- Not available

11.10. Specific target organ toxicity(repeated exposure):

- Not available

11.11. Aspiration hazard

- Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Fish - Not available

12.1.2. Invertebrate

- Not available

12.1.3. Algae

- Not available

12.2. Persistence and degradability

12.2.1. Persistence

- Not available

12.2.2. Degradability

- Not available

12.3. Bioaccumulative potential

12.3.1. Bioaccumulation

- Not available

12.3.2. Biodegradability

- Not available

12.4. Mobility in soil

- Not available

12.5. Results of PBT and vPvB assessment

- Not available

12.6. Other adverse effects

- Not available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

- Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process.

- If water separation is possible, pre-process with Water separation process.

- Dispose by incineration.

- The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities.

person who establish and operate waste disposal facilities.

- Dispose of waste in accordance with all applicable laws and regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN No.

14.1.1. UN No. (ADR/RID/ADN)

- Not applicable

14.1.2. UN No. (IMDG)

- Not applicable

14.1.3. UN No. (ICAO)

- Not applicable

14.2. UN proper shipping name

- Not applicable

14.3. Transport hazard class(es)

14.3.1. ADR/RID/ADN Class

- Not applicable

14.3.2. ADR/RID/ADN Class

- Not available

14.3.3. ADR Label No.

- Not applicable

14.3.4. IMDG Class

- Not applicable

14.3.5. ICAO Class/Division

- Not applicable

14.3.6. Transport Labels

- Not applicable

14.4. Packing group

14.4.1. ADR/RID/ADN Packing group

- Not applicable

14.4.2. IMDG Packing group

- Not applicable

14.4.3. ICAO Packing group

- Not available

14.5. Environmental hazards

- Not applicable

14.6. Special precautions for user

- Local transport follows in accordance with Dangerous goods Safety Management Law.
- Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.
- EmS FIRE SCHEDULE : Not available
- EmS SPILLAGE SCHEDULE : Not available
- Air transport(IATA): Not subject to IATA regulations.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulation / legislation specific for the substance or mixture

- 15.1.1. Europe regulatory
 - 15.1.1.1 REACH Restricted substance under REACH
 - Not applicable
 - 15.1.1.2 REACH Substances subject to authorization under REACH
 - Not applicable
 - 15.1.1.3 REACH SVHC
 - Not applicable
 - 15.1.1.4 Europe PBT
 - Not applicable
 - 15.1.1.5 European Union (EU) Transport of Dangerous Goods by Road Dangerous Goods List
 - Not applicable

15.2. Chemical Safety Assessment

- Not conducted

SECTION 16: OTHER INFORMATION

16.1. Indication of changes

- The Safety Data Sheet has been reviewed and the data therein were revised and laid out according the requirements of the Commission Regulation (EC) No. 1907/2006

16.2. Abbreviations and acronyms

- 1272/2008 CLP : Classification, Labelling and Packaging regulation.
- REACH : Registration, Evaluation and authorisation of chemical substances.
- DNEL : Derive no effects level
- PNEC : Predicted no effect concentration

16.3. Key literature references and sources for data

- This Safety Data Sheet was compiled with data and information from the following sources: RTECS, ECOSAR, HSDB, SIDS SIAP, ChemWATCH, CESAR, Chemical DB

16.4. Classification procedure

- The mixture classification has been derived based on the classification of the individual components in accordance with the rules set out in Regulation (EC) No 1272/2008 (CLP) as well as the translation tables in Annex VII to the same regulation.

16.5. Training advice

- Not applicable

16.6. Further information

- The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

- This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only.

- It should not therefore be construed as guaranteeing any specific property of the product.

- Contact a poison control centre, List of Telephone Numbers : AUSTRIA (Vienna Wien) +43 1 406 43 43; BELGIUM (Brussels Bruxelles) +32 70 245 245; BULGARIA (Sofia) +359 2 9154 409; CZECH REPUBLIC (Prague Praha) +420 224 919 293;
DENMARK (Copenhagen) 82 12 12 12; ESTONIA (Tallinn) 112; FINLAND (Helsinki) +358 9 471 977; FRANCE (Paris) +33 1 40 0548 48; GERMANY (Berlin) +49 30 19240; GREECE (Athens Athinai) +30 10 779 3777; HUNGARY (Budapest) 06 80 20 11 99;
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