

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name **Z. PLAST 104/N**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use **Adesivo per l'incollaggio di tubazioni di PVC rigido**

1.3. Details of the supplier of the safety data sheet

Name **FRATELLI ZUCCHINI srl**
Full address **via Colombo, 6**
District and Country **44100 Ferrara (FE) Italia**
Tel. **0532-782611**
Fax **0532-732121**

e-mail address of the competent person responsible for the Safety Data Sheet **tecnico@zucchini.it**

1.4. Emergency telephone number

For urgent inquiries refer to **0532-782734 Monday to Friday from 8.30 to 13.00 and from 14.00 to 17.00**

2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Danger Symbols: **F-Xi**R phrases: **11-36-66-67**

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

2.2. Label elements.

Hazard labelling pursuant to Directives 67/548/EEC and 1999/45/EC and subsequent amendments and supplements.



- R11** HIGHLY FLAMMABLE.
R36 IRRITATING TO EYES.
R66 REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67 VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.
- S 2** KEEP OUT OF THE REACH OF CHILDREN.
S16 KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
S26 IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF WATER AND SEEK MEDICAL ADVICE.
S29 DO NOT EMPTY INTO DRAINS.
S46 IF SWALLOWED, SEEK MEDICAL ADVICE IMMEDIATELY AND SHOW THIS CONTAINER OR LABEL.

Contains epoxy constituents. See information supplied by the manufacturer.



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Contains: RESINA EPOSSIDICA LIQUIDA BASE EPICLORIDRINA E BISFENOLO A
May cause allergic reactions.

2.3. Other hazards.

Information not available.

3. Composition/information on ingredients.**3.1. Substances.**

Information not relevant.

3.2. Mixtures.**Contains:**

Identification.	Conc. %	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
2-PROPANONE			
CAS. 67-64-1	18 - 19,5	R66, R67, F R11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC. 200-662-2			
INDEX. 606-001-00-8			
Reg. no. 2_Propanone: 01-21194713330-49			
CICLOESANONE			
CAS. 108-94-1	8,5 - 10	F R10, Xn R20/21/22, Xi R38, Xi R41	Flam. Liq. 3 H226, Acute Tox. 4 H332, Acute Tox. 4 H312, Acute Tox. 4 H302, Skin Irrit. 2 H315, Eye Dam. 1 H318
EC. 203-631-1			
INDEX. 606-010-00-7			
Reg. no. 01-2119453616-35			
2-BUTANONE			
CAS. 78-93-3	32,5 - 35	R66, R67, F R11, Xi R36	Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066
EC. 201-159-0			
INDEX. 606-002-3			
METIL BENZENE			
CAS. 108-88-3	4,5 - 5	R67, F R11, Xn R48/20, Xn R63, Xn R65, Xi R38, Note 4	Flam. Liq. 2 H225, Repr. 2 H361d, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H336
EC. 203-625-9			
INDEX. 601-021-00-3			
Reg. no. 2119471310			
RESINA EPOSSIDICA LIQUIDA BASE EPICLORIDRINA E BISFENOLO A			
CAS. 25068-38-6	0,5 - 0,6	Xi R36/38, Xi R43, N R51/53	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 2 H411
EC. -			
INDEX. -			

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

4. First aid measures.**4.1. Description of first aid measures.**

EYES: Wash immediately with plenty of water for at least 15 minutes and call a doctor immediately. SKIN: Immediately wash with plenty of water. Consult a doctor immediately. Ingestion: give water to drink as much as possible and call your doctor immediately. Do not induce vomiting unless expressly authorized by the physician. INHALATION: Immediately seek medical attention. In the meantime, remove to fresh air, away from the accident site. If breathing is irregular or stopped, administer artificial respiration by taking the proper precautions for the rescuer.

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

For symptoms and effects of the substances seen in chap. 11 ..

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

Follow your doctor's advice



5. Firefighting measures.

Rischi specifici: gli incendi possono causare la formazione di monossido di carbonio.

5.1. Extinguishing media.

EXTINGUISHING MEDIA SUITABLE extinguishing the conventional kind: carbon dioxide, foam, dust and water spray. EXTINGUISHING MEDIA SHALL NOT use water jet. Water is not effective to extinguish the fires but can be used to cool containers exposed to flames to prevent fires and explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS FROM EXPOSURE IN CASE OF FIRE It can lead to pressure in containers exposed to fire at a risk of explosion. Avoid breathing products of combustion (carbon oxides, toxic pyrolysis products, etc..).

5.3. Advice for firefighters.

GENERAL INFORMATION Cool containers with water spray to avoid product decomposition and generation of substances potentially hazardous to health. Always wear full fire prevention. Collect contaminated fire extinguishing water must not be discharged into drains. Dispose of contaminated water used to extinguish the fire and the remainder in accordance with regulations. Hardhat with visor, fireproof clothing (jacket and trousers with straps around arms, legs and waist), gloves (fire, and dielectric), a mask with facemask that covers the entire face of the operator or a self (self-protector) in the case of large quantities of smoke.

6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Eliminate all sources of ignition (cigarettes, flames, sparks, etc..) Or heat from the area in which the loss occurred. If airborne dust fumes or respiratory protection. Stop leak if without risk. Do not handle damaged containers or spilled material before donning appropriate protective gear. For information on risks for the environment and health, respiratory protection, ventilation and individual protective measures, refer to the other sections of this sheet.

6.2. Environmental precautions.

Impedire che il prodotto penetri nelle fognature, nelle acque superficiali, nelle falde freatiche e nelle aree confinate.

6.3. Methods and material for containment and cleaning up.

Absorb spillage with inert absorbent material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc..). Remove most of the material and deposit it in containers for disposal. Remove the residue with water spray if there are no contraindications. Ensure adequate ventilation of the leakage site. The disposal of contaminated material must be carried out in accordance with the provisions of section 13 ..

6.4. Reference to other sections.

Any information regarding personal protection and disposal can be found in sections 8 and 13.

7. Handling and storage.

7.1. Precautions for safe handling.

Keep container tightly closed in dry and ventilated place at temperatures between +5 ° and +25 ° C. Keep away from heat and ignition. Do not smoke in storage areas.

7.2. Conditions for safe storage, including any incompatibilities.

Avoid accumulation of electrostatic charges. In case of pumping for the transfer of products to ground all equipment. Avoid contact with eyes and skin with the adoption of suitable protective equipment (see par.8). Putting in place the safety and hygienic measures provided for by existing laws.

7.3. Specific end use(s).

Information not available.



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Page n. 4 / 8**8. Exposure controls/personal protection.****8.1. Control parameters.**

Name	Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
2-PROPANONE						
CICLOESANONE	TLV-ACGIH			50	0	0
2-BUTANONE	TLV-ACGIH		590	0	0	0
METIL BENZENE	TLV-ACGIH		192	0	0	0

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent.

HAND PROTECTION

Protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear a mask with an A or universal filter, the class (1, 2 or 3) of which must be chosen according to the limit concentration of use (ref. standard EN 141).

The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

EYE PROTECTION

Use of protective airtight goggles (ref. standard EN 166) recommended.

9. Physical and chemical properties.**9.1. Information on basic physical and chemical properties.**

Appearance	liquid
Colour	Not available.
Odour	pungent
Odour threshold.	Not available.
pH.	
Melting or freezing point.	0 °C.
Boiling point.	56 °C.
Distillation range.	+56° +153°C
Flash point.	< 0 °C.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower explosive limit.	1,2 % (V/V).
Upper explosive limit.	13 % (V/V).
Vapour pressure.	Not available.
Vapour density	Not available.
Specific gravity.	0,949 Kg/l
Solubility	INSOLUBILE IN ACQUA SOLUBILE IN SOLVENTI ORGANICI
Partition coefficient: n-octanol/water	Not available.
Ignition temperature.	> 450 °C.
Decomposition temperature.	Not available.
Viscosity	6000 cps
Reactive Properties	Not available.



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VOC (Directive 1999/13/EC) : 58,99 % - 559,80 g/litre.
VOC (volatile carbon) : 0

10. Stability and reactivity.

Condizioni da evitare: calore, fiamme, scintille. Materiali da evitare: acidi forti, basi forti, forti agenti ossidanti. Prodotti di decomposizione: può generare gas infiammabili a contatto con metalli elementari, nitruri, agenti riducenti forti.

10.1. Reactivity.

Avoid accumulation of electrostatic charges.

10.2. Chemical stability.

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions.

Under conditions of normal use and storage of hazardous reactions are not predictable.

10.4. Conditions to avoid.

None in particular, however the usual precautions used for chemical products should be respected.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

When heated or in case of fire gases and vapors can be released potentially harmful to health.

11. Toxicological information.**11.1. Information on toxicological effects.**

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation. Vapour inhalation may moderately irritate the upper respiratory tract. Contact with skin may cause slight irritation. Ingestion may cause health problems, including stomach pain and stinging, nausea and sickness.

This product may have a degreasing action on the skin, producing dryness and chapped skin after repeated exposure.

This product contains highly volatile substances, which may cause serious depression of the central nervous system (CNS) and have negative effects, such as drowsiness, dizziness, slow reflexes, narcosis.

Possibili effetti irritanti su occhi e vie respiratorie, può causare cefalea e vertigini.

2-PROPANONE

LD50 (Oral): 5800 mg/Kg rat
LD50 (Dermal): 20000 mg/Kg rabbit

CICLOESANONE

LD50 (Oral): 1535 Mg/Kg rat
LD50 (Dermal): 948 mg/Kg rabbit
LC50 (Inhalation): 8000 mg/l rat

2-BUTANONE

LD50 (Oral): 2737 mg/kg rat
LD50 (Dermal): 6480 mg/Kg rabbit
LC50 (Inhalation): 23,5 mg/l/8h

METIL BENZENE

LD50 (Oral): 5580 mg/kg ratto
LC50 (Inhalation): 28,1 mg/l ratto
LD50 (Dermal): 12124 mg/kg coniglio

RESINA EPOSSIDICA LIQUIDA BASE EPICLORIDRINA E BISFENOLO A
LD50 (Oral): 30000 mg/kg ratto
LD50 (Dermal): > 1200 mg/kg ratto

12. Ecological information.

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil, sewers and waterways. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity.

2-PROPANONE
LC50 (96h): 8300 mg/l *Lepomis macrochirus*

12.2. Persistence and degradability.

Information not available.

12.3. Bioaccumulative potential.

Information not available.

12.4. Mobility in soil.

Information not available.

12.5. Results of PBT and vPvB assessment.

Information not available.

12.6. Other adverse effects.

Information not available.

13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14. Transport information.

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations.

These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and rail transport:

ADR/RID Class:	3	UN:	1133
Packing Group:	II		
Label:	3		
Nr. Kemler:	33		
Limited Quantity:	LQ06		
Tunnel restriction code:	(D/E)		
Proper Shipping Name:	ADHESIVES		
Special Provision:	640D		



Carriage by sea (shipping):

IMO Class:	3	UN:	1133
Packing Group:	II		
Label:	3		
EMS:	F-E, S-D		
Marine Pollutant:	NO		
Proper Shipping Name:	ADHESIVES		



Transport by air:

IATA:	3	UN:	1133
Packing Group:	II		
Label:	3		
Cargo:			
Packaging instructions:	364	Maximum quantity:	60 L
Pass.:			
Packaging instructions:	353	Maximum quantity:	5 L
Special Instructions:	A3		
Proper Shipping Name:	ADHESIVES		





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Page n. 7 / 8**15. Regulatory information.****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture.**Seveso category. 7bRestrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.Product.

Point. 3 - 40

Contained substance.

Point. 48 METIL BENZENE

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

D.Lgs. 152/2006 e successive modifiche

Emissioni:

TAB. D	Classe 3	09,51 %
TAB. D	Classe 4	39,77 %
TAB. D	Classe 5	19,22 %

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

16. Other information.

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Flam. Liq. 2	Flammable liquid, category 2
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Irrit. 2	Skin irritation, category 2
Eye Dam. 1	Serious eye damage, category 1
Repr. 2	Reproductive toxicity, category 2
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Sens. 1	Respiratory / skin sensitization, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity category 2
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H332	Harmful if inhaled.
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.



Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10	FLAMMABLE.
R11	HIGHLY FLAMMABLE.
R20/21/22	HARMFUL BY INHALATION, IN CONTACT WITH SKIN AND IF SWALLOWED.
R36	IRRITATING TO EYES.
R36/38	IRRITATING TO EYES AND SKIN.
R38	IRRITATING TO SKIN.
R41	RISK OF SERIOUS DAMAGE TO EYES.
R43	MAY CAUSE SENSITIZATION BY SKIN CONTACT.
R48/20	HARMFUL: DANGER OF SERIOUS DAMAGE TO HEALTH BY PROLONGED EXPOSURE THROUGH INHALATION.
R51/53	TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT.
R63	POSSIBLE RISK OF HARM TO THE UNBORN CHILD.
R65	HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.
R66	REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING.
R67	VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

Changes to previous review:

The following sections were modified:

02 / 03 / 04 / 05 / 06 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.