SDS

In accordance with Globally Harmonized System of Classification and Labelling of Chemicals (GHS)- Chapter 1.5 and Annex 4

SAFETY DATA SHEET

Product: E Vipafix Cement

Revision: 04	Date: 07/08/2026	Pages: 1/10

SECTION 1: IDENTIFICATION

GHS product identifier:	E Vipafix Cement
Other means of identification:	472005
Recommended use of the chemical and restrictions on use:	Adhesive for splicing conveyor belts and adhering materials such as rubber, wood and fabrics using the cold method. **Restrictions on use**: This product should not be used for applications other than those recommended in this section. For more information, consult the product's technical data sheet.
Supplier's details:	BORRACHAS VIPAL S.A **Address**: Rua Buarque de Macedo, 365, CEP: 95320-000 - Nova Prata - RS - Brazil. **Phone number**: (54) 3242-3800 **E-mail**: vipal@vipal.com.br
Emergency phone number:	(54) 3242-3800

SECTION 2: HAZARD IDENTIFICATION

Classification of the substance or mixture:	Flammable Liquids - Category 2; Skin Corrosion/Irritation - Category 2; Serious eye damage/eye irritation - Category 2A; Specific Target Organ Toxicity – Single Exposure - Category 3 - Narcotic and Category 3 - Respiratory; Hazardous to the Aquatic Environment - Acute Hazard - Category 2; Hazardous to the Aquatic Environment - Chronic Hazard - Category 2.
Classification system adopted:	Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

GHS label elements, including precautionary statements

Pictograms:

Signal word:	DANGER
Hazard statement(s):	H225 Highly flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness. H411 Toxic to aquatic life with long lasting effects.
Precautionary statement(s):	**PREVENTION:** P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 Keep container tightly closed. P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical, ventilating and lighting equipment. P242 Use non-sparking tools.

P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P264 + P265 Wash hands thoroughly after handling. Do not touch eyes.
P271 Use only outdoors or with adequate ventilation.
P273 Avoid release to the environment.
P280 Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

RESPONSE TO EMERGENCY:
P302 + P352 IF ON SKIN: Wash with plenty of water.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P319 Get medical help if you feel unwell.
P321 Specific treatment.
P332 + P317 If skin irritation occurs: Get medical help.
P337 + P317 If eye irritation persists: Get medical help.
P362 + P364 Take off contaminated clothing and wash it before reuse.
P370 + P378 In case of fire: Use carbon dioxide (CO_2), foam, water mist and powder to extinguish.
P391 Collect spillage.

STORAGE:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

DISPOSITION:
P501 Dispose of contents and container in accordance with local regulations.

Other hazards which do not result in classification:	The product has no other hazards.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

MIXTURE

Components contributing to the hazard:

Product identifier	CAS/EC	Concentration range (%)
Methyl ethyl ketone	78-93-3 201-159-0	37.62 - 56.42
Naphtha (petroleum), full-range straight-run	64741-42-0 265-042-6	22.82 - 34.24
Zinc oxide	1314-13-2 215-222-5	0.74 - 1.12

SECTION 4: FIRST-AID MEASURES

Description of necessary first-aid measures

Inhalation:	Remove victim to fresh air and keep in a position that does not obstruct breathing. If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Skin:	Wash exposed skin with sufficient amount of water to remove the product. Remove and isolate contaminated clothing and shoes. In case of skin irritation: Consult a doctor. Bring this document.
Eye:	Rinse carefully with water for several minutes. If wearing contact lenses, remove them if it is easy and keep rinsing. If eye irritation persists: consult a doctor. Bring this document.
Ingestion:	Wash the victim's mouth with plenty of water. Never give anything by mouth to an unconscious person If you feel unwell, contact a TOXICOLOGICAL INFORMATION CENTER or a doctor. Bring this document.
Most important symptoms/effects, acute and delayed:	Causes skin irritation with redness, pain and dryness. Causes serious eye irritation with redness and pain. May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing.
Indication of immediate medical attention and special treatment needed, if necessary:	Avoid contact with the product when helping the victim. If necessary, symptomatic treatment should include, above all, supportive measures such as correction of hydro electrolytic and metabolic disorders and respiratory assistance. In case of skin contact, do not rub the affected area.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:	Suitable: carbon dioxide (CO_2), foam, water mist and powder. Unsuitable: water directly onto the burning material.
Specific hazards arising from the chemical:	Combustion of the material or its packaging can form irritating and toxic gases such as carbon monoxide and dioxide. Very dangerous when exposed to excessive heat or other sources of ignition such as: sparks, open flames or flames from matches and cigarettes, welding operations, pilot lights and electric motors. May build up static charge by flow or agitation. Vapors from heated product can ignite by static discharge. Vapors are denser than air and tend to accumulate in low-lying or confined areas such as storm drains and basements. It can travel great distances causing the flame to retreat or new fires in both open and confined environments. Containers may explode if heated.
Special protective actions for fire-fighters:	If the load is involved in fire, isolate and evacuate the area to a minimum radius of 800 meters. Wear positive pressure self-contained breathing apparatus (SCBA) and full protective clothing. Containers and tanks involved in the fire must be cooled with water mist.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Isolate the leak from sources of ignition. Keep unauthorized persons away from the area. Stop the leak if it can be done without risk. Prevent sparks or flames. Do not smoke. Do not touch damaged containers or spilled product unless wearing suitable clothing. Avoid exposure to the product. Stay in a safe place with the wind at your back. Use personal protective equipment as described in section 8.
For emergency responders:	Use full PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In the event of a leak, where exposure is high, the use of an appropriate respiratory protection mask is recommended.
Environmental precautions:	Prevent spilled product from reaching watercourses and sewage systems.
Methods and materials	Use water mist to reduce vapor dispersion. Use natural or spill containment barriers. Collect spilled

for containment and cleaning up:	product and place in appropriate containers. Absorb remaining product with dry sand, earth, vermiculite, or any other inert material. Place adsorbed product in appropriate containers and remove them to a safe location. Use non-sparking tools to collect absorbed product. All equipment used for handling must be electrically grounded. For final disposal, proceed as per Section 13 of this document.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Precautions for safe handling:	Handle in a well ventilated area or with general system of ventilation/local exhaust. Avoid vapors and mists formation. Handling the product can result in electrostatic charge buildup. All ignition sources must be extinguished from areas during use. Use proper grounding procedures. Use personal protective equipment as described in section 8. Avoid contact with incompatible materials.
General hygiene:	Wash hands and face thoroughly after handling and before eating, drinking, smoking, or using the toilet. Contaminated clothing should be changed and washed before reuse. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities

Technical measures for prevention of fire and explosion:	Keep away from heat, sparks, open flame, and hot surfaces. Do not smoke. Keep the container tightly closed. Ground the container vessel and product receiver during transfers. Only use non-sparking tools. Avoid the accumulation of electrostatic charges. Use explosion-proof electrical, ventilation, and lighting equipment.
Conditions for safe storage, including any incompatibilities:	Store in a dry, well-ventilated place away from sunlight. Keep the container closed. It is not necessary addition of stabilizers and antioxidants to ensure the durability. This material may react dangerously with some incompatible materials as outlined in Section 10. Keep away from incompatible materials.
Packaging compatibilities:	Similar to the original packaging.
Inadequate packaging materials:	There are not known unsuitable material.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit:	The values below apply to workplaces. - <u>Methyl ethyl ketone:</u> OSHA - PEL - TWA: 200 ppm (590 mg/m³) (29 CFR 1910.1000 Table Z-1) (CFR); NIOSH - REL - TWA: 200 ppm (500 mg/m³); NIOSH - REL - STEL: 300 ppm (885 mg/m³); ACGIH - TLV - TWA: 75 ppm (*); ACGIH - TLV - STEL: 150 ppm (*); - <u>Zinc oxide:</u> OSHA - PEL - TWA: 5 mg/m³ (29 CFR 1910.1000 Table Z-1) (CFR); NIOSH - REL - TWA: 5 mg/m³ (TD) (FM); NIOSH - REL - STEL: 10 mg/m³ (FM); NIOSH - REL - Ceiling: 15 mg/m³ (TD); ACGIH - TLV - TWA: 2 mg/m³ (R); ACGIH - TLV - STEL: 10 mg/m³ (R).

	*: Also absorbed through the skin; CFR: See mentioned item in OSHA CFR; TD: Total dust; R: Respirable particulate matter; FM: Fumes.
Biological limit:	- Methyl ethyl ketone: ACGIH - BEI: Determinant: Methyl Ethyl Ketone in Urine. Sampling Time: End of shift. Index: 2 mg/L. Notation: Ns. Ns: The determinant is nonspecific, since it is also observed after exposure to other chemicals.
Other limits and values:	- Methyl ethyl ketone: IDLH (NIOSH, 2010): 3000 ppm.
Appropriate engineering controls:	A risk assessment is recommended to define the engineering control measures necessary to eliminate or minimize the risk. These measures help to reduce exposure to the product. Maintain atmospheric concentrations of the constituents of the material below occupational exposure limits indicated.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection:	Fully enclosed protective goggles.
Skin protection:	Impervious clothing or protective clothing chemically resistant to the product. Nitrile gloves.
Respiratory protection:	Semifacial mask with filter for organic vapors.
Thermal hazards:	It does not present thermal hazards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid viscous.
Colour:	Beige.
Odour:	Characteristic.
Melting point/freezing point:	-86 °C (-122.8 °F).
Boiling point or initial boiling point and boiling range:	65 to 125 °C (149 to 257 °F).
Flammability:	Flammable.
Lower and upper explosion limit/ flammability limit:	Upper: 12.6 % and Lower: 1.5 %.
Flash point:	-35 °C (-31 °F) - Closed cup.
Auto-ignition temperature:	- Methyl ethyl ketone: 475 °C (887 °F).
Decomposition temperature:	Not available.
pH:	Not available.

Kinematic viscosity:	Not available.
Solubility:	Immiscible in water.
Partition coeficient n-octanol/water (log value):	- Methyl ethyl ketone: log K_{ow}: 0.29.
Vapour pressure:	- Methyl ethyl ketone: 105 hPa at 20 °C (68 °F).
Density and/or relative density:	Absolute density: 0.83 to 0.86 g/cm³.
Relative vapour density:	Not available.
Particle characteristics:	Not applicable.
Other information:	Dynamic viscosity: 2610 to 3110 cP (2.61 to 3.11 Pa.s).

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	Reactivity is not to be expected under normal conditions of temperature and pressure.
Chemical stability:	Stable under normal temperature and pressure conditions.
Possibility of hazardous reactions:	- Methyl ethyl ketone: Risk of explosion on contact with hydrogen peroxide / nitric acid and hydrogen peroxide / sulfuric acid. The substance may react dangerously with oxidizing agents, trichloromethane / alkali and chromium trioxide. - Zinc oxide: Reacts violently with oils, aluminum powder and chlorinated rubber. Risk of explosion on contact with magnesium.
Conditions to avoid:	High temperatures. Ignition sources. Contact with incompatible materials.
Incompatible materials:	Alkali, aluminum, carbon monoxide, chlorinated rubber, chromium trioxide, hydrogen, hydrogen peroxide, inorganic acids, magnesium, oils, oxidizing agents and trichloromethane.
Hazardous decomposition products:	No dangerous decomposition products are known.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic. ATEmix Oral: > 5000 mg/kg. ATEmix Dermal: > 5000 mg/kg. ATEmix Vapours (4h): > 20 mg/L. ATEmix Dusts and mists (4h): > 5 mg/L.
Skin corrosion/irritation:	Causes skin irritation with redness, pain and dryness.
Serious eye damage/ irritation:	Causes serious eye irritation with redness and pain.
Respiratory or skin sensitization:	It is not expected to present respiratory or skin sensitization.
Germ cell mutagenicity:	Not classified for germ cell mutagenicity.

Carcinogenicity:	Not classified for carcinogenicity.
Reproductive toxicity:	Not classified for reproductive toxicity.
STOT - Single exposure:	May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing.
STOT - Repeated exposure:	It is not expected to exhibit specific target organ toxicity on repeated exposure.
Aspiration hazard:	It is not expected to present an aspiration hazard.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Toxic to aquatic life with long lasting effects. Information regarding to: - Naphtha (petroleum), full-range straight-run: NOEC (*Daphnia magna*, 21 d): > 1 mg/L; NOEC (*Pseudokirchneriella subcapitata*, 72 h): 0.5 mg/L; ErC_{50} (*Pseudokirchneriella subcapitata*, 72 h): 3.1 mg/L; EC_{50} (*Daphnia magna*, 48 h): 4.5 mg/L; LC_{50} (*Pimephales promelas*, 96 h): 8.2 mg/L. - Zinc oxide: LC_{50} (*Pseudokirchneriella subcapitata*, 72 h): 0.046 mg/L; NOEC (*Oncorhynchus mykiss*, 30d): 0.058 mg/L; NOEC (*Daphnia magna*, 21d): 0.058 mg/L; EC_{50} (*Ceriodaphnia dubia*, 48 h): 0.147 - 0.228 mg/L; LC_{50} (*Danio rerio*, 96 h): 0.330 - 0.760 mg/L.
Persistence and degradability:	It has no persistence and is considered rapidly degradable.
Bioaccumulative potential:	Presents high bioacumulative potencial in aquatic organisms. Information regarding to: - Naphtha (petroleum), full-range straight-run: BCF: 0.4 to 6280 log K_{ow}: 1.99 to 18.02 (calculated).
Mobility in soil:	Not determined.
Other adverse effects:	No other environmental effects known.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods

Must be disposed of as waste in compliance with local regulations. The treatment and disposal should be evaluated for each specific product.
Keep the product remains in its original and properly closed containers. Disposal should be performed as established for the product.

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SECTION 14: TRANSPORT INFORMATION

Road:	UN - United Nations: Model Regulations: • Recommendations on the Transport of Dangerous Goods.
UN number:	1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	The product is considered dangerous for the environment for land transport.
Railway regulations:	COTIF - Convention concerning International Carriage by Rail: • Appendix C: RID - Regulations concerning the International Carriage of Dangerous Goods by Rail.
UN number:	1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	The product is considered dangerous for the environment in rail transport.
Sea:	IMO - International Maritime Organization: • IMDG Code - International Maritime Dangerous Goods Code.
UN number:	1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	The product is considered a marine pollutant.
EmS:	F-E,S-D
Air:	IATA - International Air Transport Association: • DGR - Dangerous Goods Regulation.
UN number:	1133
UN proper shipping name:	ADHESIVES
Transport hazard class(es):	3
Packing group:	II
Environmental hazards:	The product is considered dangerous for the environment for air transport.
Special precautions for user:	Not applicable.

Transport in bulk according to IMO instruments:	Consult regulations: • International Maritime Organization: MARPOL: Articles, protocols, annexes, unified interpretations of the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, 2006; • International Maritime Organization: IBC code: International code for the construction and equipment of shipping carrying dangerous chemicals in bulk: With Standards and guidelines relevant to the code. IMO, London, 2007.

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations specific for the product in question

Convention concerning Safety in the use of Chemicals at Work (Convention 170) - International Labour Organization, 1990.

SECTION 16: OTHER INFORMATION

This document was prepared based on current knowledge about the proper product handling and under normal conditions of use, in accordance with the application specified on the packaging. Any other use of the product involving their combination with other products, and use various forms of those indicated, are the responsibility of the user. Warns that the handling of any chemical substance requires the prior knowledge of its hazards for the user. In the workplace it is for the user company's product promotes training of its collaborators about the possible risks arising from exposure to the chemical.

Change control:

Version	Manufacture date	Changes
04	09/01/2025	Change in section: 2, 12 and 14.

Abbreviations:
ACGIH - American Conference of Governmental Industrial Hygienists;
ATEmix - Acute Toxicity Estimate of the mixture;
BCF - Bioconcentration factor;
BEI - Biological Exposure Index;
CAS - Chemical Abstracts Service;
Ceiling - The concentration that should not be exceeded during any part of the working exposure;
EC_{50}- Effective concentration of substance that causes 50 % of the maximum response;
ErC_{50}- Effective concentration that results in a 50% reduction in the growth rate;
IDLH - Immediately Dangerous to Life or Health;
K_{ow}- Octanol-water partition coefficient;
LC_{50}- Lethal Concentration 50%;
NIOSH - National Institute for Occupational Safety and Health;
NOEC - No Observed Effect Concentration;
OSHA - Occupational Safety & Health Administration;
PBT - Persistent, bioaccumulative and toxic;
PEL - Permissible Exposure Limit;
REL - Recommended Exposure Limit;
STEL - Short Term Exposure Limit;
TLV - Threshold Limit Value;
TWA - Time Weighted Average;
UN - United Nations;

vPvB - Very Persistent and very Bioaccumulative.

Bibliographic references:

ACGIH - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIALS HYGIENISTS. TLVs® and BEIs®: Based on the Documentation of the Threshold Limit Values (TLVs®) for Chemical Substances and Physical Agents & Biological Exposure Indices (BEIs®). Cincinnati-USA, 2026.

GHS - GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS. 10th rev. ed. New York and Geneva: United Nations, 2023.