

SAFETY DATA SHEET

Product: CV-00 Vulcanizing Cement, CV-01 Vulcanizing Cement, CV-02 Vulcanizing Cement, BV- 01 Vulcanizing Cement, BV-02 Vulcanizing Cement, BV-03 Vulcanizing Cement, Vulcanizing Cement

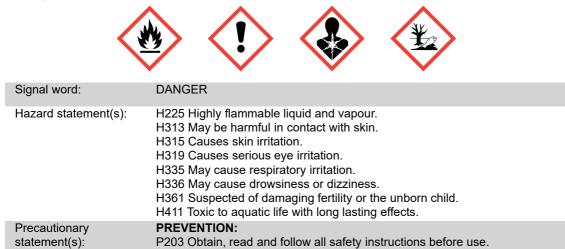
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1 - IDENTIFICATION	
GHS Product identifier:	CV-00 Vulcanizing Cement, CV-01 Vulcanizing Cement, CV-02 Vulcanizing Cement, BV- 01 Vulcanizing Cement, BV-02 Vulcanizing Cement, BV-03 Vulcanizing Cement, Vulcanizing Cement
Other means of identification:	470008, 470010, 470011, 470012, 470013, 470036, 470021, 470022, 470023
Recommended use of the chemical:	To adhere cold cure patches on tire tubes and tyres.
Specific restrictions on use:	This product should not be used for applications other than those recommended in this section. Remove all ignition sources. Keep away from heat, open flames, hot surfaces, sparks and do no smoke.
Supplier`s details:	For more information, consult the product's technical data sheet. BORRACHAS VIPAL S.A Address: Rua Buarque de Macedo, 365, CEP: 95320-000 - Nova Prata - RS - Brasil. Phone number: (54) 3242-3800 E-mail: vipal@vipal.com.br
Emergency phone number:	(54) 3242-3800

2 - HAZARD IDENTIFICATION

Classification of the	Flammable Liquids - Category 2;
substance or mixture:	Acute Toxicity - Dermal - Category 5;
	Skin Corrosion/Irritation - Category 2;
	Serious eye damage/eye irritation - Category 2A;
	Reproductive Toxicity - Category 2;
	Specific Target Organ Toxicity - Single Exposure - Category 3 - Narcotic and Category 3 -
	Respiratory;
	Hazardous to the Aguatic Environment - Acute Hazard - Category 2;
	Hazardous to the Aquatic Environment - Chronic Hazard - Category 2.
Classification system	Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.
adopted:	

GHS label elements, including precautionary statements

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Pictograms:
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	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition	sources. N
	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 in a well-ventilated area.	
	P273 Avoid release to the environment.	
	P280 Wear protective gloves, protective clothing, eye protection, face protection	and hearin
	protection.	
	RESPONSE TO EMERGENCY:	
	P302 + P317 IF ON SKIN: Get medical help.	
	P302 + P352 IF ON SKIN: Wash with plenty of water.	
	P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clo	othing. Rine
	affected areas with water [or shower].	h i n n
	P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breat P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Re	
	lenses, if present and easy to do. Continue rinsing.	
	P318 IF exposed or concerned, get medical advice.	
	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 P391 Collect spillage.	o extinguisn
	r 39 i 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:	
<u> </u>	P501 Dispose of contents and container in accordance with local regulations.	
Other hazards which do	The product has no other hazards.	
not result in classification:		

3 - COMPOSITION/INFORMATION ON INGREDIENTS MIXTURE

Components	Distillates (petroleum), c6-rich (CAS 93165-19-6): 43.92 - 65.88%;
contributing to the	Methyl ethyl ketone (CAS 78-93-3): 27.12 - 40.68%;
hazard:	Zinc bis(n-ethyl-n-phenyldithiocarbamate) (CAS 14634-93-6): 1.74 - 2.62%;
	Cyclohexyl(ethyl)amine (CAS 5459-93-8): 1.16 - 1.74%.

4 - FIRST-AID MEASURES



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Description of necessa	ary first-aid measures	
Inhalation:	Remove victim to fresh air and keep in a position that does not obstruct breathing. may not be immediate. Monitor respiratory function. If breathing with difficu necessary, apply artificial respiration. Immediately contact the TOXICOLOGICA CENTER or doctor. Bring this document.	Ity the victim. If
Skin:	Immediately remove all contaminated clothing. Rinse skin with plenty of water of Effects from skin contact may not be immediate. Immediately contact the INFORMATION CENTER or doctor. Bring this document.	
Eye:	Immediately flush eyes with sufficient amount of water, keeping eyelids open, for s wearing contact lenses, remove them if it is easy and rinse again. Consult a document.	
Ingestion:	Wash the victim's mouth with plenty of water. Never give anything by mouth to person. Oral effects may not be immediate. Immediately contact the INFORMATION CENTER or doctor. Bring this document.	
Most important symptoms/effects, acute and delayed:	Causes skin irritation with redness, pain and dryness. Causes serious eye irritation pain. May be harmful in contact with skin. May cause drowsiness or dizziness, ma 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 include, above all, supportive measures such as correction of hydro electroly disorders and respiratory assistance. In case of skin contact, do not rub the affecte	tic and metabolic

5 - FIRE-FIGHTING MEASURES

Extinguishing media:	Appropriate: carbon dioxide (CO ₂), foam, water mist and powder. Inappropriate: 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.

6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Isolate the leakage from sources of ignition. Keep unauthorized persons out of the area and away from windows. Stop the leakage if it can be done without risk. Prevent sparks or flames. Do not smoke. Do not touch damaged containers or spilled product without proper 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:	Wear complete PPE with safety glasses, safety gloves, suitable protective clothing and closed shoes. In case of leakage, where exposure is high, it is recommended to use a suitable respiratory protection mask.
Environmental precautions:	Avoid that the spilled product reaches waterways or sewage system.



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Methods and materials for containment and cleaning up:	Use water mist to reduce the dispersion of vapors. Use natural or spill conspilled products and place them in appropriate containers. Adsorb the result, earth, vermiculite, or any inert product. Place the adsorbed product remove it to a safe place. Use non-sparking tools to pick up the product, not be electrically grounded. For final disposal, proceed according to Section Large spill: confine the liquid into a dike away from the spills for later and	emaining product with dry t in proper containers and All equipment used must on 13 of this document.

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. Avoidvapors 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.	

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Occupational exposure limit:	The values below apply to workplaces.
	- Methyl ethyl ketone:
	OSHA - PEL - TWA: 200 ppm (590 mg/m³) (29 CFR 1910.1000 Table Z-1) (CFR);
	NIOSH - REL - TWA: 200 ppm (590 mg/m ³);
	NIOSH - REL - STEL: 300 ppm (885 mg/m ³);
	ACGIH - TLV - TWA: 200 ppm;
	ACGIH - TLV - STEL: 300 ppm.
	- Benzene:
	OSHA - PEL - TWA: 1 ppm (29 CFR 1910.1028, Benzene; 29 CFR 1910.1000 Table Z-2) (CFR);
	OSHA - PEL - STEL: 5 ppm (29 CFR 1910.1028, Benzene; 29 CFR 1910.1000 Table Z-2) (CFR);
	NIOSH - REL - TWA: 0.1 ppm (Ca) (AA);
	NIOSH - REL - STEL: 1 ppm;
	ACGIH - TLV - TWA: 0.5 ppm (*);
	ACGIH - TLV - STEL: 2.5 ppm (*).



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	CFR: See mentioned item in OSHA CFR; *: Also absorbed through the skin; Ca: Potential occupational carcinogen. AA: See NIOSH REL Appendix A.			
Biological limit:	 <u>Methyl ethyl ketone:</u> ACGIH - BEI: Determinant: Methyl Ethyl Ketone in Urine. Sampling Time: En Notation: Ns. <u>Benzene:</u> ACGIH - BEI: Determinant: S-phenylmercapturic acid in urine. Sampling tim µg/g creatinine. Notation: B. Determinant: t,t-muconic acid in urine. Sam Index: 500 µg/g creatinine. Rating: B. 	ne: End of shift. Index: 25 apling time: End of shift.		
	Ns: The determinant is nonspecific, since it is also observed after exposure B: The determinant may be present in biological specimens collected from been occupationally exposed, at a concentration which could affect the inte Such background concentrations are incorporated in the BEI value.	n subjects who have not		
Other limits and values:	 <u>Methyl ethyl ketone:</u> IDLH (NIOSH, 2010): 3000 ppm <u>Benzene:</u> Benzene does not have LT, but is the object of Annex 13-A, of NR15, wher to the provisions of the Annex, the parameter VRT-MPT (average concern air weighted by the time, for a working hours of eight hours, obtained i workers, individually or from Homogeneous Exposure Groups - GHE, a Instruction No. 01). According to this Annex, the values established for the for the companies included in the Annex, with the exception of steel comparis steel companies. 	tration of benzene in the n the breathing zone of as defined in Normative e VRT-MPT are 1.0 ppm		
Appropriate engineering controls:	A risk assessment is recommended to define the engineering control eliminate or minimize the risk. These measures help to reduce exposure atmospheric concentrations of the constituents of the material below occu indicated.	to the product. Maintain		
Individual protection m	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	t. Nitrile gloves.		
Respiratory protection:	Half face mask with filter against organic vapors.			
Thermal hazards:	It does not present thermal hazards.			

9 - PHYSICAL AND CHEMICAL PROPERTIES

Aspect:	Liquid, viscous.
Color:	Light beige.
Odour:	Feature.
Melting point/freezing point:	Not available.
Boiling point or initial boiling point and boiling range:	Not available.
Flammability:	Flammable.



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Lower and upper explosion limit/flammability limit:	Not available.		
Flash point:	-35 °C (-31 °F) - Closed cup.		
Auto-ignition temperature:	 <u>Distillates (petroleum), c6-rich:</u> 280 to 470 °C (536 to 878 °F) <u>Methyl ethyl ketone:</u> 475 °C (887 °F). 		
Decomposition temperature:	Not available.		
pH:	Not available.		
Kinematic viscosity:	Not available.		
Solubility(ies):	Immiscible in water.		
Partition coeficient n- octanol/water (log value):	- <u>Methyl ethyl ketone:</u> log <i>K</i> _{ow} : 0.29.		
Vapour pressure:	 Distillates (petroleum), c6-rich: ≤ 240 kPa at 37.8 °C (100.04 °F) Methyl ethyl ketone: 105 hPa at 20 °C (68 °F). 		
Relative vapour density:	Not available.		
Density and/or relative density:	Absolute density: 0.71 to 0.74 g/cm ³ .		
Particle characteristics:	Not applicable.		
Other information:	Dynamic viscosity: 1700 to 3000 cP (1.7 to 3 Pa.s).		

10 - STABILITY AND REA	ACTIVITY
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:	 <u>Methyl ethyl ketone:</u> 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.
Conditions to avoid:	High temperatures. Ignition sources. Contact with incompatible materials.
Incompatible material:	Alkali, chromium trioxide, hydrogen peroxide, inorganic acids, oxidizing agents, oxidizing materials and trichloromethane.
Hazardous decomposition products:	No dangerous decomposition products are known.

11 - TOXICOLOGICAL INFORMATION

Acute toxicity:	Product not classified as acute toxic by oral and inhalation.
	May be harmful in contact with skin.



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	ATEmix Vapours (4h): > 20 mg/L. ATEmix Oral: > 5000 mg/kg. LD₅₀ Dermal (rats): > 2000 - ≤ 5000 mg/kg.	
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. This classification is due to the possibility of this product containing benzene in a concentration equal to 0.1%. However, if this value is lower, the product will not be classified as mutagenic.	
Carcinogenicity:	Not classified for carcinogenicity. This classification is due to the possibility of this product containing benzene in a c equal to 0.1%. However, if this value is lower, the product will not be classified as carcino	
Reproductive toxicity:	Suspected of damaging fertility or the unborn child.	
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.	

12 - ECOLOGICAL INFORMATION

Toxicity:	Toxic to aquatic life with long lasting effects.
	Information regarding to:
	- <u>Distillates (petroleum), c6-rich:</u>
	ErC ₅₀ (<i>Pseudokirchneriella subcapitata</i> , 96 h): 3.1 mg/L;
	EC₅₀ (<i>Daphnia magna</i> , 48 h): 4.5 mg/L;
	LC ₅₀ (<i>Pimephales promelas</i> , 96 h): 8.2 mg/L.
	- Zinc bis(n-ethyl-n-phenyldithiocarbamate):
	LC ₅₀ (<i>Danio rerio</i> , 96 h): > 100 mg/L;
	NOEC (<i>Desmodesmus subspicatus</i> , 72h): > 1 mg/L;
	ErC ₅₀ (Green algae, 72 h): > 4.3 mg/L;
	EC ₅₀ (<i>Daphnia magna</i> , 48 h): 0.0487 mg/L.
Persistence and degradability:	It is expected that the product presents persistence and it is not considered readily biodegradable.
6 ,	Information regarding to:
	- Zinc bis(n-ethyl-n-phenyldithiocarbamate):
	Degradability rate: 0% in 28 days.
Bioaccumulative potential:	It is not expected to have a high bioaccumulative potential.
Mobility in soil:	Not determined.
Other adverse effects:	No other environmental effects known.



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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.

14 - TRANSPORT INFOR	MATION
Road:	UN - United Nations: Model Regulations: Recommendations on the Transport of Dangerous Goods.
UN number:	1133
Proper shipping name:	ADHESIVES
Primary risk class or division:	3
Subsidiary risk class or division:	NA
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
Proper shipping name:	ADHESIVES
Primary risk class or division:	3
Subsidiary risk class or division:	NA
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
Proper shipping name:	ADHESIVES
Primary risk class or division:	3
Subsidiary risk class or division:	NA
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



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Proper shipping name:	ADHESIVES	
Primary risk class or division:	3	
Subsidiary risk class or division:	NA	
Packing group:	II	
Environmental hazards:	The product is considered dangerous for the environment for air transport.	
Special precautions for user:	Not applicable.	
Maritime transport in bulk according to IMO instruments:	 Consult regulations: International Maritime Organization: MARPOL: Articles, protocols, a interpretations of the International Convention for the Prevention of Pollution from modified by the Protocol of 1978 relating thereto, consolidated edition. IMO, London, International Maritime Organization: IBC code: International code for the equipment of shipping carrying dangerous chemicals in bulk: With Standards and gut to the code. IMO, London, 2007. 	Ships, 1973, as 2006; construction and

15 - REGULATORY INFORMATION

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

TSCA: One component of this product is not listed on the TSCA.

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
00	06/25/2024	Elaboration

Abbreviations:

ACGIH - American Conference of Governmental Industrial Hygienists; ATEmix - Acute Toxicity Estimate of the mixture; BEI - Biological Exposure Index; CAS - Chemical Abstracts Service; 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%;



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LD₅₀ - Lethal Dose 50%;

NIOSH - National Institute for Occupational Safety and Health;

NOEC - No Observed Effect Concentration;

OSHA - Occupational Safety & Health Administration;

PEL - Permissible Exposure Limit;

REL - Recommended Exposure Limit;

STEL - Short Term Exposure Limit;

TLV - Threshold Limit Value;

TWA - Time Weighted Average; UN - United Nations.

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, 2023.

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