

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

Revision: 00

Date: 06/25/2024

Pages: 1/8

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. **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 not smoke. For more information, consult the product's technical data sheet.

Manufacturer's name: Vival Rubber Corporation

Address: 2601 NW 89, FL 33172 - Miami - FL - United States.

Telephone number: +1 305 640 0330

Emergency telephone number: +1 305 640 0330

2 - HAZARD IDENTIFICATION

Classification of the chemical: Flammable Liquids - Category 2;
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.

Classification system adopted: OSHA HCS 29 CFR 1910.1200
Globally Harmonized System of Classification and Labeling of Chemicals (GHS), United Nations.

Pictograms:



Signal word: DANGER

Hazard statement(s): Highly flammable liquid and vapour.
Causes skin irritation.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Suspected of damaging fertility or the unborn child.

Precautionary statement(s): **PREVENTION:**
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Keep container tightly closed.
Ground and bond container and receiving equipment.
Use explosion-proof electrical, ventilating and lighting equipment.
Use non-sparking tools.
Take action to prevent static discharges.
Avoid breathing dust/fume/gas/mist/vapours/spray.
Wash hands thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, protective clothing, eye protection, face protection and hearing protection.

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

Revision: 00

Date: 06/25/2024

Pages: 2/8

RESPONSE TO EMERGENCY:

IF ON SKIN: Wash with plenty of water.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

Call a POISON CENTER or a doctor, if you feel unwell.

Specific treatment.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing. And wash it before reuse.

In case of fire: Use carbon dioxide (CO₂), foam, water mist and powder to extinguish.

STORAGE:

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

Store locked up.

DISPOSITION:

Dispose of contents and container in accordance with local regulations.

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

3 - COMPOSITION/INFORMATION ON INGREDIENTS**MIXTURE**

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

4 - FIRST-AID MEASURES**Exposure routes**

Inhalation:	Remove victim to fresh air and keep in a position that does not obstruct breathing. Inhalation effects may not be immediate. Monitor respiratory function. If breathing with difficulty the victim. If necessary, apply artificial respiration. Immediately contact the TOXICOLOGICAL INFORMATION CENTER or doctor. Bring this document.
-------------	--

Skin contact:	Immediately remove all contaminated clothing. Rinse skin with plenty of water or take a shower. Effects from skin contact may not be immediate. Immediately contact the TOXICOLOGICAL INFORMATION CENTER or doctor. Bring this document.
---------------	--

Eye contact:	Immediately flush eyes with sufficient amount of water, keeping eyelids open, for several minutes. If wearing contact lenses, remove them if it is easy and rinse again. 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. Oral effects may not be immediate. Immediately contact the TOXICOLOGICAL INFORMATION CENTER or doctor. Bring this document.
------------	--

Most important symptoms and 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	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
---	---

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

Revision: 00

Date: 06/25/2024

Pages: 3/8

special treatment disorders and respiratory assistance. In case of skin contact, do not rub the affected area.
needed, if necessary:

5 - FIRE-FIGHTING MEASURES

Extinguishing media: Appropriate: carbon dioxide (CO₂), 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: 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.

Protective equipment: 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.

Emergency procedures: Avoid that the spilled product reaches waterways or sewage system.

Methods and materials for containment and cleaning up: Use water mist to reduce the dispersion of vapors. Use natural or spill containment barriers. Collect spilled products and place them in appropriate containers. Adsorb the remaining product with dry sand, earth, vermiculite, or any inert product. Place the adsorbed product in proper containers and remove it to a safe place. Use non-sparking tools to pick up the product. All equipment used must not be electrically grounded. For final disposal, proceed according to Section 13 of this document.
Large spill: confine the liquid into a dike away from the spills for later and proper disposition. Water mist can be used to reduce of vapors, but it wont prevent ignition in closed environments.

7 - HANDLING AND STORAGE

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. 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. 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.
Packaging compatibilities: Similar to the original packaging.
Keep away from incompatible materials.

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

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

Revision: 00

Date: 06/25/2024

Pages: 4/8

Control parameters

Occupational exposure limit: The values below apply to workplaces.

- Methyl ethyl ketone:Cal/OSHA - PEL - TWA: 200 ppm (590 mg/m³);Cal/OSHA - PEL - STEL: 300 ppm (885 mg/m³);OSHA - PEL - TWA: 200 ppm (590 mg/m³) (29 CFR 1910.1000 Table Z-1) (CFR);NIOSH - REL - TWA: 200 ppm (590 mg/m³);NIOSH - REL - STEL: 300 ppm (885 mg/m³);

ACGIH - TLV - TWA: 200 ppm;

ACGIH - TLV - STEL: 300 ppm.

- Benzene:

Cal/OSHA - PEL - TWA: 1 ppm (California Code of Regulations. Title 8. Sec 5218) (*) (CCR);

Cal/OSHA - PEL - STEL: 5 ppm (California Code of Regulations. Title 8. Sec 5218) (*) (CCR);

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 (*).

CFR: See mentioned item in OSHA CFR;

*: Also absorbed through the skin;

Ca: Potential occupational carcinogen.

AA: See NIOSH REL Appendix A;

CCR: See the item mentioned in Cal/OSHA.

Biological limit:

- Methyl ethyl ketone:

ACGIH - BEI: Determinant: Methyl Ethyl Ketone in Urine. Sampling Time: End of shift. Index: 2 mg/L. Notation: Ns.

- Benzene:

ACGIH - BEI: Determinant: S-phenylmercapturic acid in urine. Sampling time: End of shift. Index: 25 µg/g creatinine. Notation: B. Determinant: t,t-muconic acid in urine. Sampling time: End of shift. Index: 500 µg/g creatinine. Rating: B.

Ns: The determinant is nonspecific, since it is also observed after exposure to other chemicals.

B: The determinant may be present in biological specimens collected from subjects who have not been occupationally exposed, at a concentration which could affect the interpretation of the results. Such background concentrations are incorporated in the BEI value.

Other limits and values:

- Methyl ethyl ketone:

IDLH (NIOSH, 2010): 3000 ppm

- Benzene:

Benzene does not have LT, but is the object of Annex 13-A, of NR15, where, for companies subject to the provisions of the Annex, the parameter VRT-MPT (average concentration of benzene in the air weighted by the time, for a working hours of eight hours, obtained in the breathing zone of workers, individually or from Homogeneous Exposure Groups - GHE, as defined in Normative Instruction No. 01). According to this Annex, the values established for the VRT-MPT are 1.0 ppm for the companies included in the Annex, with the exception of steel companies, and 2.5 ppm for the steel companies.

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)

Hand protection:

Nitrile gloves.

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

Revision: 00

Date: 06/25/2024

Pages: 5/8

Eye protection:	Fully enclosed protective goggles.
Skin protection:	Impervious clothing or protective clothing chemically resistant to the product.
Respiratory protection:	Half face mask with filter against organic vapors.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Light beige liquid, viscous.

Odor: Feature.

Odor threshold: Not available.

Melting point/freezing point: Not available.

Initial boiling point and boiling range: Not available.

Flammability (solid, gas): Flammable.

Upper/ lower flammability or explosive limits: Not available.

Flash point: -35 °C (-31 °F) - Closed cup.

Evaporation rate: Not available.

Auto-ignition temperature: - Distillates (petroleum), c6-rich: 280 to 470 °C (536 to 878 °F)
- Methyl ethyl ketone: 475 °C (887 °F).

Decomposition temperature: Not available.

pH: Not available.

Viscosity: Not available.

Solubility(ies): Immiscible in water.

Partition coefficient n-octanol/water (log value): - Methyl ethyl ketone: log K_{ow} : 0.29.

Vapor pressure: - Distillates (petroleum), c6-rich: ≤ 240 kPa at 37.8 °C (100.04 °F)
- Methyl ethyl ketone: 105 hPa at 20 °C (68 °F).

Vapor density: Not available.

Relative density: Not available.

Other information: Absolute density: 0.71 to 0.74 g/cm³.
Dynamic viscosity: 1700 to 3000 cP (1.7 to 3 Pa.s).

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.

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

Revision: 00

Date: 06/25/2024

Pages: 6/8

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

Symptoms related to the physical, chemical and toxicological characteristics:	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.
Delayed and immediate effects and also chronic effects from short and long-term exposure	
Acute toxicity:	Product not classified as acute toxic. ATEmix Vapours (4h): > 20 mg/L. ATEmix Oral: > 5000 mg/kg. ATEmix Dermal: 51,724 mg/kg.
Skin corrosion/irritation:	Causes skin irritation with redness, pain and dryness.
Eye damage/irritation:	Causes serious eye irritation with redness and pain.
Sensitization - respiratory or skin:	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 concentration equal to 0.1%. However, if this value is lower, the product will not be classified as carcinogenic.
Toxic to reproduction:	Suspected of damaging fertility or the unborn child.
Specific target organ toxicity (single exposure):	May cause drowsiness or dizziness, may cause dizziness and nausea. May cause respiratory irritation, may cause cough and sneezing.
Specific target organ toxicity (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

Ecotoxicity:	Not classified according to the used criteria, however, it presents relevant data, as described below.
Persistence and degradability:	It is expected that the product presents persistence and it is not considered readily biodegradable.
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.

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

Revision: 00

Date: 06/25/2024

Pages: 7/8

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.

14 - TRANSPORT INFORMATION**International regulations**

Road: DOT - U.S. Department of Transportation.- Code of Federal Regulations.

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 not considered dangerous for the environment for land 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

Proper shipping name: ADHESIVES

Primary risk class or division: 3

Subsidiary risk class or division: NA

Packing group: II

Environmental hazards: The product is not considered dangerous for the environment for air transport.

Transport in bulk according to MARPOL 73/78, Annex II, and the IBC Code: 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;

In compliance with OSHA HCS 29 CFR 1910.1200

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

Revision: 00

Date: 06/25/2024

Pages: 8/8

• 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.

Special precautions for user: Not applicable.

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.

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

16 - Other information, including date of preparation or last revision

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;

IDLH - Immediately Dangerous to Life or Health;

K_{ow} - Octanol-water partition coefficient;

NIOSH - National Institute for Occupational Safety and Health;

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.