



According to ABNT NBR 14725-4:2014

Version number: 102 27/12/2021 Revision date:

Trade name: 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

I Identification of the product and of the company

1.1 Product identifier

Trade name: 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

Internal identification code: 470008, 470010, 470011, 470012, 470013, 470036, 470021, 470022, 470023

Main recommended uses for the substance or product:

To adhere cold cure patches on tire tubes and tires.

For further information consult the technical data sheet.

Uses advised against: This product must not be used for applications other than those recommended in this section.

1.2 Identification of the company

Manufacturer/Supplier: Vipal Rubber

365, Buarque de Macedo Street

Nova Prata-RS - Brazil

E-mail: vipal@vipal.com.br

Emergency telephone number: +55 54 3242 3800

2 Hazards identification

2.1 Classification of the substance or mixture

Classification according to ABNT NBR 14725-2:2009 - 2019 Amendment

Globally Harmonized System (GHS)

2.2 Label elements

Hazard pictograms









GHS07

Signal word: Danger

Hazard-determining components of labelling:

Distillates (petroleum), C6-rich

Butanone

Hazard statements:

H225 Highly flammable liquid and vapour.





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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361 Suspected of damaging fertility or the unborn child.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

H372 Causes damage to organs through prolonged or repeated exposure.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects

Precautionary statements:

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations

2.3 Other hazards: Not applicable.

3 Composition/information on ingredients

3.1 Chemical characterization: Mixture

Dangerous components:

| CAS | Chemical name or technical name | Concentration (%) |
|-----------------------------------|-------------------------------------------------------|-------------------|
| CAS: 93165-19-6 | Distillates (petroleum), C6-rich | 50-60 |
| EINECS: 296-903-4 | Muta. 1A, H340; Carc. 1A, H350; Asp. Tox. 1, H304 | |
| CAS: 78-93-3 | butanone | |
| EINECS: 201-159-0 | Flam. Liq. 2, H225 | 25-35 |
| EINECS: 201-139-0 | Eye Irrit. 2, H319; STOT SE 3, H336 | |
| CAS: 5459-93-8 | cyclohexyl(ethyl)amine | 1-2 |
| EINECS: 226-733-8 | Acute Tox. 4, H302 | 1-2 |
| | benzene | |
| | Flam. Liq. 2, H225 | |
| CAS: 71-43-2 EINECS: 200-753-7 | Acute Tox. 1, H310 | <0.1 |
| | Muta. 1B, H340; Carc. 1A, H350; STOT RE 1, H372; Asp. | |
| | Tox. 1, H304 | |
| | Skin Irrit. 2, H315; Eye Irrit. 2, H319 | |

Additional information: P Note: It is not necessary to classify as a carcinogen because the substance contains less than 0.1% w/w benzene.





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4 First aid measures

4.1 Description of first aid measures

After inhalation: If case of indisposition, contact the Toxicology Information Center or a doctor. Bring this MSDS. Remove the victim to fresh air. If the victim is breathing with difficult, give oxygen. if necessary administer artificial respiration. Seek medical advice.

After skin contact: Remove contaminated clothing. Wash exposed skin with large amounts of water for at least 30 minutes. Seek medical advice.

Do not palpate nor rub the affected area.

After eye contact: Wash immediately with running water for at least 30 minutes, keeping eyelids open. If it's possible, remove contact lenses and seek immediate medical assistance.

After swallowing: Do not induce vomiting; call for medical help immediately

Most important symptoms and effects, both acute and delayed:

It can cause damages to the central and peripheral nervous systems due to prolonged and repeated exposure.

Aspiration can cause pulmonary oedema and chemical pneumonitis.

It can cause damages to the cardiovascular system with tachycardia and ventricular arrhythmia.

May cause skin irritation with dryness and redness.

May cause eye irritation with tearing, pain and redness.

May cause shortness of breath, cough, dizziness drowsiness, weakness, loss of consciousness and headache.

4.2 Indication of any immediate medical attention and special treatment needed:

Avoid contact with the product when helping the victim.

If necessary, symptomatic treatment should include, above all, support measures to correction of hydro electrolytic and metabolic disturbances, and respiratory assistance.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use chemical-powder (PQS), chemical-foam, or CO_2 sprinkles. Use water-mist spout to cool down adjacencies.

Unsuitable extinguishing agents: Jet of water.

5.2 Special hazards arising from the substance or mixture: Dangerous when exposed to excessive heat or other sources of ignition.

The combustion of the product or its packaging can cause irritating and toxic gases, like carbon monoxide and dioxide.





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It can move long distances causing retrogression of flame or new fires both in open environments such as confined.

The vapors are denser than air and tend to collect in low or confined areas.

The combustion of the product or its packaging can cause irritating and toxic gases, like carbon monoxide and dioxide.

During heating or in case of fire poisonous gases are produced

5.3 Advice for firefighters: Self-contained breathing apparatus (SCBA), complete protective clothing, and leather gloves

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For people who are not part of the emergency services:

Eliminate all ignitions sources. Do not smoke.

Do not touch nor walk over spilt product.

Stay away from low areas and keep the wind to your back.

For people part of the emergency services:

Use waterproof protection clothes, nitrile gloves, closed shoes, protection googles, and breathing mask for organic vapors.

Maintain unauthorized people away.

6.2 Environmental precautions:

Prevent seepage into sewage system, workpits and cellars.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Collect the material and put it into adequate containers, duly labeled for further treatment and disposal.

7 Handling and storage

7.1 Precautions and directions for safe handling:

Handle the product in ventilated area or with general ventilation/exhaust system.

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Hygienic measures: Wash your hands before eating, drinking, smoking or using the toilet. Contaminated clothing should be changed and washed before reuse.





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7.2 Conditions for safe storage, including any incompatibilities: Keep in a cool, covered and ventilated area, away from direct sunlight, moisture and strong sources of ozone.

Prevention of fire and explosions:

Store in heated receptacles.

Inspect containers for damage or leaks before handling them.

Remove all sources of ignition. Keep away from heat, open flames, hot surfaces, sparks and not smoke.

Information about storage in one common storage facility: Store away from foodstuffs.

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

| 71-43-2 - benzene | | |
|-------------------|-------------------------------------------------------------------------------------------|--|
| WEL | Long-term value: 3.25 mg/m³, 1 ppm Carc; Sk | |
| 78-93-3 - bu | utanone | |
| WEL | Short-term value: 899 mg/m³, 300 ppm Long-term value: 600 mg/m³, 200 ppm Sk, BMGV | |
| 93165-19-6 | - Distillates (petroleum), C6-rich | |
| | ACGIH (2014) TLV-TWA 50 ppm NIOSH (2011) REL-TWA 50 ppm OSHA (2010) PEL-TWA 500 ppm | |

Ingredients with biological limit values:

| 93165-19-6 - Distillates (petroleum), C6-rich | | | | |
|-----------------------------------------------|--------------------------------------------------------------|--|--|--|
| BEI | 2.5-hexanedione in urine: 0.4 mg/l (end of last working day) | | | |
| (ACGIH, 2014) | | | | |
| 78-93-3 - butanone | | | | |
| BMGV | 70 μmol/L | | | |
| | Medium: urine | | | |
| | Sampling time: post shift | | | |
| | Parameter: butan-2-one | | | |

Limitation and supervision of exposure into the environment: Steam aspiration systems must be projected in observance to local regulations concerning limits of emission of volatiles substances.





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8.2 Engineering control measures: Provide mechanical ventilation and exhaust system so to maintain the vapor concentration lower than the tolerance limit.

8.3 Personal protective equipment

Eye protection: Tightly sealed goggles

Protection of hands and body: Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Use waterproof clothes.

Recommended: Nitrile gloves

Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Indication: breathing mask for organic vapors.

Thermal Hazards: Not applicable

9 Physical and chemical properties

Appearance (physical state, form e colour): Viscous liquid, light beige

Odour and odour limit: Characteristic.

pH: Not available.

Melting point/freezing point: -95 °C (hexane)

-86 °C (butanone)

Initial boiling point and temperature range: 58-74 °C (hexane)

79 °C (butanone)

Flash point: -35 °C (closed cup - hexane).

Evaporation rate: Not available.

Flammability (solid, gas): Não aplicável..

Lower/upper limit of flammability or explosiveness:

Lower: 1.1 Vol % (hexane)/1.5 Vol % (butanone)

Upper: 7.5 *Vol* % (hexane)/12.6 *Vol* % (butanone)

Vapour pressure at 20 °C: 17 kPa (hexane)

105 mBar (butanone)

Vapour density at 20 °C: 3.0 air=1 (hexane)

2.41 air=1 (butanone)

Relative density at 20 °C: 0.7 (hexane)

0.81 at 20 °C (butanone)





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Solubility: Insoluble (water).

Partition coefficient: n-octanol/water: 3.9 log kow (hexane)

0.29 log kow (butanone)

Auto-ignition temperature: 475 °C (butanone)

225 °C (hexane)

Decomposition temperature: Not available. **Viscosity at 23 °C:** 0.4 cPs (hexane/butanone)

9.2. Other information: No further relevant information available.

10 Stability and reactivity

10.1 Reactivity: May have reactions with incompatible materials.

10.2 Chemical stability: Stable in normal use conditions.

10.3 Possibility of hazardous reactions: No dangerous reactions known.

10.4 Conditions to avoid: Elevated temperatures. Ignition sources and incompatible materials contact.

10.5 Incompatible materials: Strong acids, strong bases, isocyanates, ammonium, amine, pyridine, and compounds with large affinity to the cetone group.

Strong agents (liquid chlorine, concentrated oxygen and dinitrogen tetraoxide).

10.6 Hazardous decomposition products: During combustion, it can emit acid and toxic gases, carbon oxide, chlorinated products, phosgene, smoke, and particulates.

11 Toxicological information

Acute toxicity: Product not classified as acute toxic.

| LD/LC50 values relevant for classification: | | | |
|-----------------------------------------------|---------|----------------------|--|
| 93165-19-6 - Distillates (petroleum), C6-rich | | | |
| Oral | LD50 | >5.000 mg/kg (rat) | |
| Dermal | LD50 | 3.000 mg/kg (rat) | |
| Inhalative | LD50/4h | > 5.000 ppm (rat) | |
| 78-93-3 - bu | tanone | | |
| Oral | LD50 | 2.900 mg/kg (rat) | |
| Dermal | LD50 | >8000 mg/kg (rabbit) | |
| Inhalative | LD50/4h | 32 mg/l (mouse) | |
| 71-43-2 - be | nzene | | |





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| Oral | LD50 | 4894 mg/kg (rat) |
|------------|---------|-------------------|
| Dermal | LD50 | 48 mg/kg (mouse) |
| Inhalative | LD50/4h | 9980 mg/l (mouse) |

Skin corrosion/irritation: It can cause irritation, redness, and burning sensation.

Serious eye damage/irritation: It can cause eye irritation accompanied by redness.

Respiratory or skin sensitization: May cause dermatitis with dryness by repeated or prolonged exposure. Not expected to give rise sensitization breathing.

Germ cell mutagenicity: It is not expected mutagenic effects in germ cells.

Carcinogenicity: Butanone: carcinogenic effect is not completely confirmed. Tests of lymphoma in mice: negative

Hexane: benzene concentration inferior to 0.1%, not classified as carcinogenic.

Reproductive toxicity: It is not expected to present toxicity to reproduction and lactation.

Toxicity for specific target organ-single exposure: It can cause respiratory tract irritation and narcotic effects with breathlessness, cough, dizziness, drowsiness, weakness, loss of consciousness and headache.

It can cause damages to the central nervous system with loss of conscience and convulsion.

Toxicity for specific target organ-repeated exposure: It can cause damage to the central nervous system and peripheral nervous system by reptida and prolonged exposure.

Aspiration hazard: The aspiration of the product may cause pulmonary edema and chemical pneumonitis.

12 Ecological information

12.1 Ecotoxicity: Toxic to aquatic life.

Hexane:

CL50 (fish, 96h): 2.5 mg/l

Butanone:

CL50 (fish, 96h): 3200 mg/l

CE50 (crustacean, 48h): 5091 mg/l

12.2 Persistence and degradability: It is expected to be inherently biodegradable.

12.3 Bioaccumulative potential: It does not present bioaccumulative potential in aquatic organisms

Hexane:

BCF:200

Log kow: 3.90

Butanone:

BCF: 3000





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Log Kow: 0.29

12.4 Mobility in soil: High mobility in soil

12.5 Other adverse effects: No further relevant information available.

13 Disposal considerations

13.1 Waste treatment method

Product: Treatment and disposal must be specifically evaluated for each product. Federal, state, and city laws must be consulted. Must not be disposed together with household garbage. Do not allow product to reach sewage system. Packaging (plastic and/or cardboard), if not contaminated, should be discarded in accordance to present law.

Product remains: Keep the product remains in its original packaging. Disposal should be carried out as established for the product.

Uncleaned packaging: Disposal must be made according to official regulations.

14 Transport information

Land transport:

Not available.

Water transportation:

International Maritime Organization (IMO)

International Maritime Dangerous Goods Code (IMDG Code)

Air transport:

International Air Transport Association (IATA)

Dangerous Goods Regulation (DGR)

UN-Number: UN1133

UN proper shipping name

1133 ADHESIVES, containing flammable liquid.

Transport hazard class(es): 3 Flammable liquids.

Packing group: II.

Marine pollutant: Yes.

Limited quantities (LQ): 5L

EMS: F-E,S-D.

Environmental hazards: The product is dangerous for the environment.





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15 Regulatory information

Regulations

International Maritime Organization (IMO);

International Maritime Dangerous Goods Code (IMDG Code);

International Air Transport Association (IATA);

Dangerous Goods Regulation (DGR).

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This form provides information on protection, health, safety and the environment. Note that the handling of any chemical substance requires prior knowledge of its dangers to users.

The company using the product is responsible for providing training for its employees and hired parties with regards to the possible adverse risks of the product.

References:

SYSTEM OF CHEMICAL EXPOSURE HAZARD (SIRETOX). Available at: http://www.siretox.com.br.

OSHA: Available at: < www.osha.gov>.

BR Petrobras Distribuidora. Material Safety Data Sheet, Solbrax 55/75. Revision date: 16/11/2018.

BRENNTAG. Material Safety Data Sheet, Methyl Ethyl Ketone. Revision date: 28/09/2016.

BRASKEM, Material Safety Data Sheet, Braskem Ezolem 6/7. Revision date: 15/08/2017.