Safety Data Sheet

According to (CE) No 1907/2006, amended by Regulation (EU) 2020/878

Version number: *105* ***Revision date:*** *13/09/2023*

Trade name: Cemento Vulcanizante RVA-0, Cemento Vulcanizante RVA-1, Cemento Vulcanizante RVA-2

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

1.1 Product identifier

Trade name: Cemento Vulcanizante RVA-0, Cemento Vulcanizante RVA-1, Cemento Vulcanizante RVA-2
Internal identification code: *RVA-0, RVA-1, RVA-2*

UFI: *F444-0SVE-E00W-N7KU*

Relevant identified uses of the substance or mixture and uses advised against: *To adhere cold cure patches on tire tubes and tires.*

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

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

For further information consult the technical data sheet.

1.2 rubber vulk, Lda.
Zona Industrial,
Lote 21 Vilarinho,
3680-323 Oliveira de Frades Portugal
+351 232 763 110
info@rubbervulk.com

2 Hazards identification

2.1 Classification of the substance or mixture

Labelling according to Regulation (EC) No 1272/2008

Globally Harmonized System (GHS)

2.2 Label elements

GHS02 GHS07 GHS08 GHS09

Signal word: *Danger*

Hazard-determining components of labelling:

Distillates (petroleum), C6 – rich

Butanone

Hazard statements:

H225 Highly flammable liquid and vapour – Flam. Liq. 2.

H304 May be fatal if swallowed and enters airways – Asp. Tox. 1.

H315 Causes skin irritation – Skin Irrit. 2.

H319 Causes serious eye irritation – Eye Irrit. 2A.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness – STOT SE 3.

H361 Suspected of damaging fertility or the unborn child – Repr. 2.

H372 Causes damage to organs through prolonged or repeated exposure – STOT RE 1.

H401 Toxic to aquatic life – Aquatic Acute 2.

H411 Toxic to aquatic life with long lasting effects – Aquatic Chronic 2.

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 *EINECS: 296-903-4*	*Distillates (petroleum), C6-rich* *Muta. 1A, H340; Carc. 1A, H350; Asp. Tox. 1, H304;*	*50-70*
CAS: 78-93-3 *EINECS: 201-159-0*	*Butanone* *Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336;*	*25-35*
CAS: 5459-93-8 *EINECS: 226-733-8*	*Cyclohexyl(ethyl)amine* *Acute Tox. 4, H302;*	*1-2*
CAS: 71-43-2 *EINECS: 200-753-7*	*Benzene* *Flam. Liq. 2, H225; Acute Tox. 1, H310; Muta. 1B, H340; Carc. 1A, H350; STOT RE 1, H372; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Eye Irrit. 2, H319;*	*<0.1*

Additional information: *It is not necessary to classify the substance as cancerigenous, as it contains less tham 0.1 % m/m of 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: Do not palpate nor rub the affected area. Remove contaminated clothing. Wash exposed skin with large amounts of water for at least 30 minutes. Seek medical advice.

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. Rinse out mouth and then drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed: 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. 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. If can cause damages to the cardiovascular system with tachycardia and ventricular arrhythmia.

4.3 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 disturbance, 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. 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. During heating or in case of fire poisonous gases are produced. Formation of toxic gases is possible during heating or in case of fire.

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: *Do not touch nor walk over spilt product. Eliminate all ignitions sources. Do not smoke. 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. Isolate the area in a radius of at least 50 meters, in all directions. Keep away from unauthorized persons.*

6.2 Environmental precautions: *Isolate the area of the accident. 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: *Collect the material and put it into adequate containers, duly labeled for further for further treatment and disposal. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13.*

6.4 Reference to other sections: *No applicable*

7 Handling and storage

7.1 Precautions for safe handling: *Handle the product in ventilated area or with general ventilation / exhaust system. Ensure good ventilation / exhaustion at the workplace. Avoid the formation of vapors or mists.*

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

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

Keep in a cool, covered and ventilated area, away from direct sunlight, moisture and strong sources of ozone. Inspect containers for damage or leaks before handling them.

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

7.3 Specific end use(s): *To adhere cold cure patches on tire tubes and tyres.*

8 Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

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71-43-2 - Benzene	
WEL	Long-term value: 3.25 mg/m³, 1 ppm Carc; Sk
78-93-3 - Butanone	
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 (ACGIH, 2014)	2.5-hexanedione in urine: 0.4 mg/L (end of last working day)
78-93-3 - Butanone	
BMGV	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one
71-43-2 - Benzene	
ACGIH - Biological determinant of exposure	S-phenylmercapturic acid in urine (1997); EIB: 25 ug/g

8.2 Exposure controls

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.

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

Eye protection: Tightly sealed goggles

Protection of hands and body: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendations to the glove material can be given for the product / the preparation / the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several

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substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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 available

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Viscous liquid

Colour: Light blue

Odour: Characteristic

Melting point/freezing point: No disponible

Boiling point or initial boiling point and boiling range: 58 - 79 °C (hexane/butanone)

Flammability: Not applicable

Lower and upper explosion limit: Lower: 1.1 Vol % (hexane) / Upper: 7.5 Vol % (hexane), 12.6 Vol % (butanone)

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

Auto-ignition temperature: 225 °C (hexane)

Decomposition temperature: Not available

pH: Not available

Viscosity at 23 °C: 2.000 – 3.000 cP

Solubility: Insoluble (water)

Partition coefficient n-octanol/water: 3.90 log POW (hexane) / 0,29 log know (butanone)

Vapour pressure: 17 kPa (hexane) / 105 mBar (butanone)

Relative density at 23 °C (water): 0.71 - 0.74 g/cm^3

Vapour density (air=1): 3.0 (hexane) / 2.41 (butanone)

Particle characteristics: No applicable

9.2 Other information: No further relevant information available.

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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: A toxic gas mixture is formed upon combustion,chiefly containing CO_2 and CO.

11 Toxicological information

11.1 Information on hazard classes

Acute toxicity: Product not classified as acute toxic.

LD/LC50 values relevant for classification:		
78-93-3 Butanone		
Oral	LD50	2900 mg/kg (rat)
Dermal	LD50	>8000 mg/kg (rabbit)
Inhalative	LD50/4h	32 mg/L (rat)
93165-19-6 Distillates (petroleum), C6-rich		
Oral	LD50	>5.000 mg/kg (rat)
Dermal	LD50	3.000 mg/kg (rat)
Inhalative	LD50/4 h	>5.000 ppm (rat)
71-43-2 Benzene		
Oral	LD50	4894 mg/kg (rat)
Dermal	LD50	48 mg/kg (rat)
Inhalative	LD50/4 h	9980 mg/L (rat)

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

Serious eye damage/irritation: May cause eye irritation with tearing, pain and 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: *Suspected of damaging fertility or the unborn child.*

Toxicity for specific target organ (STOT) - single exposure: *It can cause damages to the central nervous system with loss of conscience and convulsion. It can cause respiratory tract irritation and narcotic effects with breathlessness, cough, dizziness, drowsiness, weakness, loss of consciousness and headache.*

Toxicity for specific target organ (STOT) - 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 Toxicity: *Very toxic to aquatic life with long lasting effects.*

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 bioacumulative potential in aquatic organisms.*

Hexane: BCF: 200; Log Kow: 3.90

Butanone: BCF: 3000; Log Kow: 0.29

12.4 Mobility in soil: *High mobility in soil.*

12.5 Results of PBT and vPvB assessment: *Not available*

12.6 Endocrine disrupting properties: *Not applicable*

12.7 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. The requirements of Directive 2008/98/EC, 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: *Do not reuse empty containers. These may contain residues of the product and should be kept closed and sent for proper disposal as required for the product.*

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14 Transport information

Land transport, water transportation, air transport:

Directive 2008/68/EC, on the inland transport of dangerous goods

International Maritime Organization (IMO)

International Maritime Dangerous Goods Code (IMDG Code)

International Air Transport Association (IATA)

Dangerous Goods Regulation (DGR)

14.1 UN number or ID number: *UN1133*

14.2 UN proper shipping name: *1133 ADHESIVES, containing flammable liquid*

14.3 Transport hazard class(es): *3 Flammable liquids*

14.4 Packing group: *II*

14.5 Environmental hazards: *The product is dangerous for the environment.*

Marine pollutant: *Yes*

Limited quantities (LQ): *5L*

EMS: *F-E, S-D*

14.6 Special precautions for user: *Not available*

14.7 Maritime transport in bulk according to IMO instruments: *Not applicable*

15 Regulatory information

Regulations

International Maritime Organization (IMO)

International Maritime Dangerous Goods Code (IMDG Code)

International Air Transport Association (IATA)

Dangerous Goods Regulation (DGR)

Directive 2008/68/EC, on the inland transport of dangerous goods

Regulation (CE) No 1907/2006, amended by Regulation (EU) 2020/878

Regulation (EC) No 1272/2008, on classification, labelling and packaging of substances and mixtures

Directive 2008/98/EC, on waste and repealing

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.

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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.

Data compared to the previous version altered: *Trade name code update*

References:

International Uniform ChemicaL Information Database (IUCLID): Available in: https://iuclid6.echa.europa.eu/.

ECOTOX DATABASE: Available in: https://cfpub.epa.gov/ecotox/.

Occupational Safety and Health Administration (OSHA): Available in: < www.osha.gov>.

American Conference of Governmental Industrial Hygienists (ACGIH). Available in: https://www.acgih.org/.

National Institute for Occupational Safety and Health (NIOSH). Available in: https://www.cdc.gov/niosh/index.htm.

BR Petrobras Distribuidora. Material Safety Data Sheet, Hexane BR. Revision date: 24/10/2018.

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.