

Safety Data Sheet

KE-1 (C55B2)

According to 1907/2006/EC, Article 31 and 453/2010/EU

Revision Date: 11/02/2015, Edition: 02



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

1.1 Product identifier

Product name: KE-1(C55B2)

Product description: Cationic bituminous emulsion

REACH registration number: Mixture (registration is not required according to REACH regulation, 1907/2006/EC)

1.2 Relevant identified uses of the substance or mixture and uses advised against

Intended uses: Tuck coat in road construction. It must be used only for professional use.

1.3 Details of the supplier of the safety data sheet

BITUMIX S.A.

PRODUCTION OF BITUMINOUS MIXTURES

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1.4 Emergency telephone number

National Chemical Emergency Centre (24h): +44 (0) 1235 239 670

2. Hazards identification

2.1 Classification of the substance or mixture

The product is not classified as hazardous according to Regulation 1272/2008/EC (CLP) and subsequent amendments.

2.2 Label elements

Hazard labeling according to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms: Not applicable

Signal words: Not applicable

Hazard statements: Not applicable

Precautionary statements:

P273: Avoid release to the environment.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

2.3 Other hazards

Information not available

3. Composition/information on ingredients

3.1 Substances

The product is mixture

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3.2 Mixtures

It contains the following hazardous substances:

Ingredient name	Percent %	REACH registration number	CAS number	EC number	Classification 1272/2008 (CLP)
Kerosene	0,2-1,2		8008-20-6	232-366-4	Flam. Liq. 3 H226, Asp. Tox. 1 H304, STOT SE 3 H336i, Skin Irr 2, H315 Aquatic Chronic 2 H411, Aquatic Acute 2 H401

4. First aid measures

4.1 General information

After inhalation: Remove patient to fresh air and seek medical attention. In case of unconsciousness, place patient stably in side position for transportation.

After skin contact: Remove contaminated clothing. Wash skin with soap and water.

After eye contact: Wash immediately eyes with plenty of water for a long time keeping the eyelids open and seek medical attention.

After swallowing: Rinse mouth immediately and then drink plenty of water. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable: CO₂, dry chemical powder, sand, foam

Unsuitable for safety reasons: Water with full jet, water spray

5.2 Special hazards arising from the substance or mixture

The product is not flammable in the form in which it available. In case of incomplete burning may be formed CO, H₂S, SO_x and other harmful compounds.

5.3 Advice for fire-fighters

Special protective equipment:

Fireproof suit with helmet (EN 469, 533, 1486) and self breathing apparatus (EN 137)

Additional information:

Remove the product packaging and other flammable materials away from the fire and if it is required, cool the packaging's outside with water. Contaminated water and residues from the fire are collected separately and disposed of in accordance with local regulation. It must not enter the sewage system.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with spilled material. Remove all the contaminated clothes. Use the appropriate means of body protection (see section 8). Don't breathe vapours of product.

6.2 Environmental precautions

Avoid water and ground contamination. Do not allow to enter sewers and water surfaces.

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6.3 Methods and material for containment and cleaning up

Limit the spread of the material forming protective barriers with sand or sawdust. Collect as much product as you can in a clean container for reuse (by preference) or dispose of as hazardous waste. Cover the rest product with some inert material or powder for disposal. In case of water contamination inform immediately the local authorities for the restriction of the damage. Dispose contaminated materials as hazardous waste according to item 13.

6.4 Reference to other sections

See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin. Do not eat or drink while handling the material. Use appropriate means of body protection (gloves, gowns, shoes). Apply all rules of personal hygiene after each use. Avoid contact with strong bases. Avoid leakage of the product into the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store in covered and sheltered from frost places and at temperatures of not less than 2°C. Application temperature between 2°C and 60°C. At low temperatures may cause coagulation of the emulsion, while at high temperatures the product rapidly breaks making it difficult or impossible to implement. When the product is to be stored for a long time, stirring is required every 2 days.

7.3 Specific end use(s)

No further relevant information available.

8. Exposure controls/personal protection

8.1 Control parameters

Ingredient name	ACGIH-TLV(3/2012) TWA	NIOSH REL (1/2013) TWA	NIOSH REL (1/2013) STEL
Kerosene	100mg/m ³ , 8h		
Bitumen fumes (>120°C)	0,5mg/m ³	5mg/m ³	

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Avoid contact with skin and eyes. Keep away from foodstuffs, beverages and feed. Wash hands and face before breaks and at the end of work.

Protection of hands:

Wear suitable gloves (EN 374). The glove material has to be impermeable and resistant to the product. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation (nitrile rubber, chloroprene rubber, PVC). 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. For this reason the suitability of gloves should be checked before use.

Eye protection:

Wear safety glasses (EN 166).

Body protection:

Wear category II professional long-sleeved overalls and safety footwear (EN 340, 365, 466, 467). In case of release wear PVC apron (EN 345).

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Brown
Odour:	Slight ammonia odor
pH-value:	>2
Melting point/Melting range:	0°C
Boiling point/Boiling range:	>100°C
Flash point:	Non-flammable
Decomposition temperature:	Not determined
Self-igniting:	Non-flammable
Danger of explosion:	Product is not explosive
Explosion limits:	
Lower:	Not determined
Upper:	Not determined
Vapour pressure:	Not determined
Solubility:	Soluble in water
Density at 25°C:	1,00 – 1,02 gr/cm ³
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Segregation coefficient (n-octanol/water):	Not determined
Dynamic viscosity at 25°C :	20-80cP

9.2 Other information

Content of V.O.C: Subcategory: Binding Primers.

Limit value V.O.C: 30gr/lit. Max value V.O.C: 7gr/lit

10. Stability and reactivity

10.1 Reactivity

There are no particular risks of reaction with other substances in normal conditions of storage and use.

10.2 Chemical stability

The product is stable in normal conditions of use and storage. It does not decompose when it is stored and is handled properly and is not polymerised.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Avoid contact with strong bases, the overheating of the product and the boiling development.

10.5 Incompatible materials

Oxidising substances, bases.

10.6 Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

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11. Toxicological information

Acute toxicity:

Ingredient name	Result	Species	Dose	Exposure
Kerosene	LD50 Oral	Rat	>5000mg/kg	
	LD50 Dermal	Rabbit	>2000mg/kg	
	LC50 Inhalation	Rat	>5mg/l	4ώρες
Bitumen	LD50 Oral	Rat	>5000mg/kg	14 days
	LD50 Dermal	Rabbit	>2000mg/kg	14 days
	LC50 Inhalation	Rat	>94,4mg/m3	4,5h -14 days

Corrosion/Irritation

Not available.

Sensitization respiratory or skin

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

No classifications because the product has a viscosity greater than 20,5cSt at 40°C.

Potential acute health effects

Eye contact: May cause eye irritation.

Skin contact: May cause skin irritation.

Inhalation: No known significant effects or critical hazards.

Ingestion: May cause serious problems in the airways and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Irritation, redness.

Skin contact: Irritation, redness.

Inhalation: Not available.

Ingestion: Nausea, puke.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure:

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Long term exposure:

Potential immediate effects: Not available.

Potential delayed effects: Not available.

Potential chronic health effects: Not available.

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Conclusion/Summary

General: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Other information: No known significant effects or critical hazards.

12. Ecological information

Dissolve in water in any proportion and can spread to it. Contamination of water with the product may cause long-term effects on aquatic organisms. In case of soil contamination the product remain on the soil surface and decomposed in present of oxygen

12.1 Toxicity: Not available.

12.2 Persistence and degradability: Not available.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Not available.

12.5 Results of PBT and vPvB assessment: Not available.

12.6 Other adverse effects: Not available.

13. Disposal considerations

13.1 Waste treatment methods

Recovery and reuse of the product is preferred. If this is not possible, incinerate the material in suitable incineration plant in accordance with the law and the approval of local authorities. Product residues should be considered hazardous waste and must be treated according to current regulations. The same shall apply to the absorption materials accidental release of the product.

Uncleaned packaging:

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information

Not classified as hazardous according to transport regulations ADR / RID, IMDG, IATA / ICAO

Road and Rail transport ADR/RID

UN number: 1999

UN proper shipping name: Tars, liquid including road asphalt and oils, bitumen and cut backs

ADR/RID, class: Not applicable

Packaging group: Not applicable

Environmental hazards: Yes

Special precautions for user: Not available.

Additional information: Not applicable

Maritime transport IMDG

UN number: 1999

UN proper shipping name: Tars, liquid including road asphalt and oils, bitumen and cut backs

IMDG class: Not applicable

Packaging group: Not applicable

Environmental hazards: Yes

Special precautions for user: Not available.

Additional information: Not applicable

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Air transport ICAO και IATA

UN number: 1999

UN proper shipping name: Tars, liquid including road asphalt and oils, bitumen and cut backs

ICAO/IATA-class: Not applicable

Packaging group: Not applicable

Environmental hazards: Yes

Special precautions for user: Not available.

Additional information: Not applicable

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

Not Rated

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Category Seveso: Not applicable

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006:

Not applicable

Substances in Candidate List (Art. 59 REACH): None

Substances subject to authorization (Annex XIV REACH): None

Substances subject to exportation reporting pursuant to (EC) Reg. 689/2008: None

Substances subject to the Rotterdam Convention: None

Substances subject to the Stockholm Convention: None

Healthcare controls: Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

VOC Directive 2004/42/EK: Binding Primers. V.O.C=7gr/lt

15.2 Chemical safety assessment: No chemical safety assessment has been processed for the mixture and the substances it contains.

16. Other information

Text of hazard (H) indications and explanation of symbols mentioned in the previous paragraphs

Flam. Liq. 3	Flammable liquid, category 3
Asp. Tox. 1	Aspiration hazard, category 1
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Acute 2	Hazardous to the aquatic environment, acute toxicity, category 2
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H226	Flammable liquid and vapors.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H401	Toxic to aquatic organisms.
H411	Toxic to aquatic life with long lasting effects.

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- ACGIH: American Conference of Governmental Industrial Hygienists
- ADR: Agreement on dangerous goods by road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- NIOSH: National Institute for Occupational Safety and Health
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- REL: Recommended Exposure Limit
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation.

Notice to reader:

The information contained in this SDS is based on our current knowledge and information gained by applicable law. Any descriptions and data given herein may be changed without prior notice. Reported information is not a guarantee of product properties and do not justify legal consequences, but provide a framework welfare of the product for particular uses.