

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: ABNT NBR 14725-4:2014

| Issuing Date | 13-May-2021 | Revision Date 13-May-2021 | Revision Number | 1.0 |
|--|---|---|-----------------|-----|
| 1. Identific | ation | | | |
| Product ident | ifier_ | | | |
| Product Name | e | Braskem Ezolem™ 6-15 | | |
| Other means | of identification | | | |
| Product Code | e(s) | P552 | | |
| UN/ID no | | UN1268 | | |
| Synonyms | | Naphtha (petroleum), solvent-refined light | | |
| Recommende | ed use of the chemical | and restrictions on use | | |
| Recommende | d use | Professional use Industrial Use in production of formulations: Adhesives, Paint | | |
| Uses advised | against | No information available. | | |
| Details of the supplier of the safety data sheet | | | | |
| Capuava Santo André, S | - Costa e Silva, 1178 – SP, CEP: 09270-001, Br 5 (11) 4478-1777 | asil | | |
| E-mail addres | S | productsafety@braskem.com | | |
| Emergency te | lephone number | | | |
| Emergency te | lephone | CHEMTREC: (021) 3958-1449, (011) 4349-1359, 0800 892 0479 (1-703-741-5970 (INTERNATIONAL) | BRAZIL) | |

2. Hazard(s) identification

GHS Classification Most Important Hazards

Classification assessment completed in accordance with ABNT NBR 14725-2.

| Aspiration hazard | Category 1 |
|---|-------------|
| Acute toxicity - Dermal | Category 4 |
| Germ cell mutagenicity | Category 1B |
| Carcinogenicity | Category 1B |
| Hazardous to the Aquatic Environment - Acute Hazard | Category 2 |
| Hazardous to the Aquatic Environment - Chronic Hazard | Category 2 |
| Flammable liquids | Category 2 |

Label elements



Signal word Danger

Hazard statements

Harmful in contact with skin May cause genetic defects May cause cancer Toxic to aquatic life with long lasting effects May be fatal if swallowed and enters airways Highly flammable liquid and vapor **Precautionary Statements - Prevention** Obtain special instructions before use Do not handle until all safety precautions have been read and understood Wear protective gloves/protective clothing/eye protection/face protection Avoid release to the environment Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Use explosion-proof electrical/ventilating/lighting/equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention Call a POISON CENTER or doctor if you feel unwell IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower Wash contaminated clothing before reuse IF SWALLOWED: Immediately call a POISON CENTER or doctor Do NOT induce vomiting In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish Collect spillage

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

No information available.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% |
|---|------------|----------|
| Naphtha, petroleum, solvent-refined light | 64741-84-0 | 100 |

4. First-aid measures

Description of first aid measures

Sensitivity to static discharge

Special protective equipment for

fire-fighters

Sensitivity to mechanical impact None.

Yes.

gear. Use personal protection equipment.

| General advice | IF exposed or concerned: Get medical advice/attention. Immediate medical attention is required. Show this safety data sheet to the doctor in attendance. |
|--|--|
| Inhalation | Aspiration into lungs can produce severe lung damage. If breathing has stopped, give artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Get immediate medical advice/attention. Delayed pulmonary edema may occur. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician. |
| Ingestion | ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. |
| Self-protection of the first aider | Remove all sources of ignition. See section 8 for more information. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. |
| Most important symptoms and effect | cts, both acute and delayed |
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. |
| Indication of any immediate medica | I attention and special treatment needed |
| Note to physicians | Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances. |
| 5. Fire-fighting measures | |
| Suitable Extinguishing Media | Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam. |
| Unsuitable extinguishing media | None known based on information supplied. |
| Specific hazards arising from the chemical | Risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. May emit toxic fumes under fire conditions. |
| Hazardous combustion products | Carbon monoxide. Carbon dioxide (CO2). |
| Explosive properties | |

Page 3 / 10

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

| Personal precautions | Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid breathing vapors or mists. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required. See section 8 for more information. |
|-------------------------------------|---|
| Other information | Ventilate the area. Refer to protective measures listed in Sections 7 and 8. |
| For emergency responders | Use personal protection recommended in Section 8. |
| Environmental precautions | |
| Environmental precautions | Prevent entry into waterways, sewers, basements or confined areas. Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Avoid release to the environment. Do not allow run-off from fire-fighting to enter drains or water courses. |
| Methods and material for containm | ent and cleaning up |
| Methods for containment | Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. |
| Methods for cleaning up | Take precautionary measures against static discharges. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. |
| Prevention of secondary hazards | Clean contaminated objects and areas thoroughly observing environmental regulations. |
| 7. Handling and storage | |
| Precautions for safe handling | |
| Advice on safe handling | Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Do not eat, drink or smoke when using this product. Remove contaminated clothing and shoes. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. |
| Conditions for safe storage, includ | ing any incompatibilities_ |

| Storage Conditions | Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials. |
|------------------------|--|
| Incompatible materials | Strong oxidizing agents. Strong acids. |

8. Exposure controls/personal protection

| Exposure guidelines | This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|-------------------------------------|---|
| Appropriate engineering controls | |
| Engineering controls | Showers Eyewash stations Ventilation systems. |
| Individual protection measures, suc | h as personal protective equipment |
| Eye/face protection | Tight sealing safety goggles. |
| Hand protection | Impervious gloves. Nitrile rubber. Polyvinyl chloride (PVC). Polyvinyl alcohol. For additional information, consult the PPE supplier. |
| Skin and body protection | Chemical resistant apron. Antistatic boots. Long sleeved clothing. Wear suitable protective clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. |
| General hygiene considerations | Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. |
| Environmental exposure controls | Do not allow into any sewer, on the ground or into any body of water. Avoid release to the environment. |

9. Physical and chemical properties

| Information on basic physical and c | hemical properties | |
|--|--------------------------|------------------|
| Appearance | Clear liquid | |
| Physical state | Liquid | |
| Color | Colorless to yellow | |
| Odor | Characteristic | |
| Odor threshold | No information available | |
| Property_ | Values | Remarks • Method |
| pH | No data available | None known |
| Melting point / freezing point | -90 °C | None known |
| Initial boiling point and boiling | 73.6 °C | None known |
| range | | |
| Flash point | -38 °C | None known |
| Evaporation rate | 4.42 | None known |
| Flammability | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | 7.6% | |
| Lower flammability or explosive limits | 1.4% | |
| Vapor pressure | 133.54 mmHg | None known |

None known

Vapor density Relative density Water solubility Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity Explosive properties Oxidizing properties

Other information Softening point Molecular weight VOC Content (%) Liquid Density Bulk density 3-4 0.69 - 0.78 g/cm³ @ 20°C Insoluble Ethanol No data available 280 - 465 °C No data available No data available 0.457 mPa s No information available. No information available.

No information available No information available No information available No information available No information available

10. Stability and reactivity

| <u>Reactivity</u> | |
|------------------------------------|--|
| Reactivity | None under normal use conditions. |
| Sensitivity to static discharge | Yes. |
| Sensitivity to mechanical impact | None. |
| Chemical stability | |
| Stability | Stable under normal conditions. |
| Possibility of hazardous reactions | |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | |
| Conditions to avoid | Heat, flames and sparks. Eliminate sources of ignition. |
| Incompatible materials | |
| Incompatible materials | Strong oxidizing agents. Strong acids. |
| Hazardous decomposition products | <u>.</u> |
| Hazardous decomposition products | Hazardous decomposition products due to incomplete combustion: Carbon monoxide. Carbon dioxide (CO2). |

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation

Specific test data for the substance or mixture is not available. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract.

| Eye contact | Specific test data for the substance or mixture is not available. May cause irritation. | |
|--|--|--|
| Skin contact | Specific test data for the substance or mixture is not available. Repeated exposure may cause skin dryness or cracking. May be absorbed through the skin in harmful amounts. Harmful in contact with skin. (based on components). | |
| Ingestion | Specific test data for the substance or mixture is not available. Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways. | |
| Symptoms related to the physical, chemical and toxicological characteristics | | |
| Symptoms | Difficulty in breathing. Coughing and/ or wheezing. Dizziness. | |
| Acute toxicity | | |

Numerical measures of toxicity

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|--------------------|-----------------------|----------------------|
| Naphtha, petroleum, solvent-refined light | > 7000 mg/kg (Rat) | > 2000 mg/kg (Rabbit) | = 73680 ppm (Rat)4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| Skin corrosion/irritation | No information available. |
|-----------------------------------|---|
| Serious eye damage/eye irritation | No information available. |
| Respiratory or skin sensitization | No information available. |
| Germ cell mutagenicity | Contains a known or suspected mutagen. Classification based on data available for ingredients. May cause genetic defects. |
| Carcinogenicity | Contains a known or suspected carcinogen. Classification based on data available for ingredients. May cause cancer. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Target organ effects | No information available. |
| Neurological effects | No information available. |
| Aspiration hazard | May be fatal if swallowed and enters airways. |
| 12. Ecological information | |

Ecotoxicity

Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|---|---|---|-------------------------------|---|
| Naphtha, petroleum, solvent-refined light | EC50: =4700mg/L (72h, Pseudokirchneriella subcapitata) | LC50: =4.4mg/L (96h, Oncorhynchus mykiss) LC50: =8.41mg/L (96h, Oncorhynchus mykiss) | - | EC50: =9.74mg/L (48h, Daphnia magna) |
| Persistence and degradability | No information a | vailable. | | |
| Mobility in soil | No information available. | | | |
| Bioaccumulation | No information available. | | | |

| 13. Disposal considerations | | | | |
|-------------------------------------|--|--|--|--|
| Waste from residues/unused products | Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation. | | | |
| Contaminated packaging | Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers. | | | |

14. Transport information

| Land transport - ANTT | |
|-----------------------------------|--|
| Proper shipping name | PETROLEUM DISTILLATES, N.O.S. (Naphtha, petroleum, solvent-refined light) |
| UN number | UN1268 |
| Transport hazard class(es) | 3 |
| Packing group | |
| Hazard identification number | 33 |
| Environmental hazards | Toxic to aquatic life with long lasting effects |
| | |
| Maritime transport - IMDG | |
| Proper shipping name | PETROLEUM DISTILLATES, N.O.S. (Naphtha, petroleum, solvent-refined light) |
| UN number | UN1268 |
| Transport hazard class(es) | 3 |
| Packing group | |
| Environmental hazards | Toxic to aquatic life with long lasting effects |
| Marine pollutant | Yes |
| Transport in bulk according to | |
| Annex I or II of MARPOL 73/78 and | |
| the IBC or IGC Code: | |
| Product name | Not available. Consult IMO guidelines before transporting in bulk |
| | |
| <u>Air transport - IATA</u> | Detectory distillation is a (New title instantion as heart of the dilight) |
| Proper shipping name | Petroleum distillates, n.o.s. (Naphtha, petroleum, solvent-refined light) |
| UN number | UN1268 |
| Transport hazard class(es) | 3 |
| Packing group | |
| Environmental hazards | Toxic to aquatic life with long lasting effects |

This information does not intend to convey all specific regulatory or operational requirements/information relating to the product, therefore it cannot be considered exhaustive. Consult ANTT, IMO and ICAO regulations before transporting the product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory information

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

Brazil

See section 8 for national exposure control parameters

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

16. Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

| Legend | Section 8: EXPOSURE CONTROLS/PERSO | | |
|---------|------------------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) EPA (Environmental Protection Agency) Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

| Issuing Date | 13-May-2021 |
|---------------|------------------|
| Revision Date | 13-May-2021 |
| Revision Note | Initial Release. |

This safety data sheet was created pursuant to the requirements of: ABNT NBR 14725-4:2014, ABNT NBR 14725-2:2009.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet