

SECTION 1: Identification

1.1. GHS Product identifier

| | |
|----------------|--|
| Product form | : Substance |
| Substance type | : UVCB |
| Trade name | : White Spirit |
| Chemical name | : Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction |
| CAS-No. | : 68477-39-4 |
| Product code | : P901 |

1.2. Other means of identification

| | |
|--------------|----------------|
| EC Index-No. | : 649-409-00-1 |
| EC-No. | : 270-728-3 |

1.3. Recommended use of the chemical and restrictions on use

| | |
|---------------------|--|
| Recommended use | : Industrial use, Solvent used in the formulation of paints and thinners |
| Restrictions on use | : No additional information available |

1.4. Supplier's details

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Camaçari, BA, CEP: 42810-000, Brasil
Tel: +55 (71) 3413-3600
productsafety@braskem.com

1.5. Emergency phone number

| | |
|------------------|---|
| Emergency number | : CHEMTREC Brazil (Rio De Janeiro): +(55)-2139581449 Portuguese CHEMTREC Brazil (São Paulo): +(55)-1143491359 Portuguese CHEMTREC Brazil: 0800 892 0479 Portuguese CHEMTREC International: +1 703-741-5970 |
|------------------|---|

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GHS BR (ABNT NBR 14725: 2023)

Flammable liquids, Category 3
Acute toxicity (oral), Category 4
Acute toxicity (dermal), Category 5
Skin corrosion/irritation, Category 2
Serious eye damage/eye irritation, Category 2
Carcinogenicity, Category 1B
Reproductive toxicity, Category 2
Specific target organ toxicity – Single exposure, Category 3, Narcosis
Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
Aspiration hazard, Category 1
Hazardous to the aquatic environment – Acute Hazard, Category 1
Hazardous to the aquatic environment – Chronic Hazard, Category 1

2.2. GHS Label elements, including precautionary statements

GHS BR labelling

Hazard pictograms (GHS BR)



Signal word (GHS BR)

: Danger

Hazard statements (GHS BR)

: H226 - Flammable liquid and vapour.
H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H313 - May be harmful in contact with skin
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H336 - May cause drowsiness or dizziness.
H350 - May cause cancer.

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

Precautionary statements (GHS BR)

H361 - Suspected of damaging fertility or the unborn child.
H410 - Very toxic to aquatic life with long lasting effects.
: P201 - Obtain special instructions before use.
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.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical, lighting, ventilating equipment.
P242 - Use only non-sparking tools.
P243 - Take action to prevent static discharges.
P261 - Avoid breathing mist, spray, vapours.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear eye protection, protective clothing, protective gloves.
P301+P310 - IF SWALLOWED: Immediately call a doctor, a POISON CENTER.
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - IF exposed or concerned: Get medical advice/attention.
P312 - Call a POISON CENTER or a doctor if you feel unwell.
P330 - Rinse mouth.
P331 - Do NOT induce vomiting.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P370+P378 - In case of fire: Use carbon dioxide (CO₂), dry extinguishing powder, foam to extinguish.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, national regulation.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

| | |
|----------------|--|
| Substance type | : UVCB |
| Name | : Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction |
| CAS-No. | : 68477-39-4 |
| EC-No. | : 270-728-3 |
| EC Index-No. | : 649-409-00-1 |
| Formula | : Unspecified |

| Name | Product identifier | % |
|---|---------------------|---------|
| Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction (UVCB) | CAS-No.: 68477-39-4 | 100 |
| Nonane | CAS-No.: 111-84-2 | 10 – 25 |
| Decane | CAS-No.: 124-18-5 | 0 – 10 |
| Benzene, 1,2,4-trimethyl- | CAS-No.: 95-63-6 | 0 – 10 |
| 3,3-Dimethyloctane | CAS-No.: 4110-44-5 | 0 – 7 |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| Name | Product identifier | % |
|----------------------------|---------------------|---------|
| Benzene, ethylmethyl- | CAS-No.: 25550-14-5 | 0 – 5 |
| 1,3,5-Trimethylbenzene | CAS-No.: 108-67-8 | 0 – 5 |
| propylbenzene | CAS-No.: 103-65-1 | 0 – 3 |
| 1,2,4-Trimethylcyclohexane | CAS-No.: 2234-75-5 | 0 – 3 |
| 4-Methyloctane | CAS-No.: 2216-34-4 | 0 – 3 |
| Isopropylcyclohexane | CAS-No.: 696-29-7 | 0 – 3 |
| Isobutylcyclohexane | CAS-No.: 1678-98-4 | 0 – 3 |
| Heptane, 3,4-dimethyl- | CAS-No.: 922-28-1 | 0 – 3 |
| Ethyl cyclohexane | CAS-No.: 1678-91-7 | 0 – 3 |
| 1,2,3-Trimethylbenzene | CAS-No.: 526-73-8 | 0 – 3 |
| Xylene | CAS-No.: 1330-20-7 | 0 – 3 |
| octane; n-octane | CAS-No.: 111-65-9 | 0 – 2 |
| Octane, 3,6-dimethyl- | CAS-No.: 15869-94-0 | 0 – 2 |
| Heptane, 3,5-dimethyl- | CAS-No.: 926-82-9 | 0 – 0.7 |
| Heptane, 2,5-dimethyl- | CAS-No.: 2216-30-0 | 0 – 0.6 |
| cumene | CAS-No.: 98-82-8 | 0 – 0.6 |
| 3-methylheptane | CAS-No.: 589-81-1 | 0 – 0.4 |
| p-Cymene | CAS-No.: 99-87-6 | 0 – 0.4 |
| 2-methylheptane | CAS-No.: 592-27-8 | 0 – 0.3 |
| Isobutylbenzene | CAS-No.: 538-93-2 | 0 – 0.3 |

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

| | |
|---------------------------------------|---|
| First-aid measures general | : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible). IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell. |
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. In all cases of doubt, or when symptoms persist, seek medical attention. |
| First-aid measures after skin contact | : Rinse immediately with plenty of water for 15 minutes. Remove contaminated clothes. If skin irritation occurs: Get medical advice/attention. |
| First-aid measures after eye contact | : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| First-aid measures after ingestion | : Rinse mouth. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Immediately call a POISON CENTER/doctor. |

4.2. Most important symptoms and effects, acute and delayed

| | |
|-------------------------------------|--|
| Symptoms/effects | : May cause cancer. Suspected of damaging fertility or the unborn child. |
| Symptoms/effects after inhalation | : May cause respiratory irritation. May cause drowsiness or dizziness. Aspiration of this material may cause chemical pneumonia. |
| Symptoms/effects after skin contact | : May be harmful in contact with skin. Causes skin irritation. |
| Symptoms/effects after eye contact | : Causes serious eye irritation. |
| Symptoms/effects after ingestion | : Harmful if swallowed. May be fatal if swallowed and enters airways. |

4.3. Indication of any immediate medical attention and special treatment needed, if necessary

| | |
|---------------------|--------------------------|
| Note to physician : | : Treat symptomatically. |
|---------------------|--------------------------|

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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| Suitable extinguishing media | : Foam. Dry powder. Carbon dioxide. Water spray. Sand. |
| Unsuitable extinguishing media | : Do not use a solid water stream as it may scatter and spread fire. |

5.2. Specific hazards arising from the chemical

- | | |
|------------------|---|
| Fire hazard | : Flammable liquid and vapour. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. |
| Explosion hazard | : May form flammable/explosive vapour-air mixture. |

5.3. Special protective actions for fire-fighters

- | | |
|---------------------------------------|---|
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment. |
| Protective equipment for firefighters | : Do not enter fire area without proper protective equipment, including respiratory protection. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|------------------|--|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Spilled material may present a slipping hazard. Avoid contact with spilled material. |
|------------------|--|

6.1.1. For non-emergency personnel

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|----------------------|---|
| Protective equipment | : Complete protective clothing. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Only qualified personnel equipped with suitable protective equipment may intervene. Avoid breathing mist, spray, vapours. |

6.1.2. For emergency responders

- | | |
|----------------------|---|
| Protective equipment | : Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Ventilate area. Stop leak if safe to do so. Prevent entry to sewers and public waters. |

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|--|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leaks if it can be done without personal risk. Control the vapours with a fine water spray. |
| Methods for cleaning up | : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials. Notify authorities if product enters sewers or public waters. |
| Other information | : Dispose of in a safe manner in accordance with local/national regulations. |

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|--|
| Additional hazards when processed | : Handle empty containers with care because residual vapours are flammable. |
| Precautions for safe handling | : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Take all necessary technical measures to avoid or minimize the release of the product on the workplace. Limit quantities of product at the minimum necessary for handling and limit the number of exposed workers. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Take precautionary measures against static discharge. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Use only non-sparking tools. Provide local exhaust or general room ventilation. Avoid breathing mist, spray, vapours. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Floors, walls and other surfaces in the hazard area must be cleaned regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. |
| Hygiene measures | : Always wash hands after handling the product. Handle in accordance with good industrial hygiene and safety practice. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

7.2. Conditions for safe storage, including any incompatibilities

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|------------------------|--|
| Technical measures | : Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use only explosion-proof equipment. |
| Storage conditions | : Keep only in the original container in a cool, well ventilated place away from : Incompatible materials. Keep container tightly closed. Store locked up. Store in a well-ventilated place. |
| Incompatible materials | : Strong oxidizing agents. |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| | |
|--|---|
| Nonane (111-84-2) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Nonane |
| ACGIH OEL TWA [ppm] | 200 ppm |
| Remark (ACGIH) | TLV® Basis: CNS impair |
| Regulatory reference | ACGIH 2024 |
| octane; n-octane (111-65-9) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Octane, all isomers |
| ACGIH OEL TWA | 1400 mg/m³ |
| ACGIH OEL TWA [ppm] | 300 ppm |
| Remark (ACGIH) | TLV® Basis: URT irr |
| Regulatory reference | ACGIH 2024 |
| Benzene, 1,2,4-trimethyl- (95-63-6) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | 1,2,4-Trimethyl benzene |
| ACGIH OEL TWA [ppm] | 10 ppm |
| Remark (ACGIH) | TLV® Basis: CNS impair; hematologic eff. Notations: A4 (Not classifiable as a Human Carcinogen) |
| ACGIH chemical category | Not Classifiable as a Human Carcinogen |
| Regulatory reference | ACGIH 2024 |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | 1,3,5-Trimethyl benzene |
| ACGIH OEL TWA [ppm] | 10 ppm |
| Remark (ACGIH) | TLV® Basis: CNS impair; hematologic eff |
| Regulatory reference | ACGIH 2024 |
| 1,2,3-Trimethylbenzene (526-73-8) | |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | 1,2,3-Trimethyl benzene |
| ACGIH OEL TWA [ppm] | 10 ppm |
| Remark (ACGIH) | TLV® Basis: CNS impair; hematologic eff |
| Regulatory reference | ACGIH 2024 |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| cumene (98-82-8) | |
|--|---|
| Brazil - Occupational Exposure Limits | |
| Local name | Cumeno (Isopropil benzeno) |
| OEL TWA | 190 mg/m ³ |
| OEL TWA [ppm] | 39 ppm |
| Remark (NR-15) | Absorção também p/pele |
| Regulatory reference | Norma Regulamentadora Nº 15 - Atividades e Operações Insalubres |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Cumene |
| ACGIH OEL TWA [ppm] | 5 ppm |
| Remark (ACGIH) | TLV® Basis: URT adenoma; neurological eff. Notations: A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans) |
| ACGIH chemical category | Confirmed Animal Carcinogen with Unknown Relevance to Humans |
| Regulatory reference | ACGIH 2024 |
| Xylene (1330-20-7) | |
| Brazil - Occupational Exposure Limits | |
| Local name | Xileno (xilol) |
| OEL TWA | 340 mg/m ³ |
| OEL TWA [ppm] | 78 ppm |
| Remark (NR-15) | Absorção também p/pele |
| Regulatory reference | Norma Regulamentadora Nº 15 - Atividades e Operações Insalubres |
| Brazil - Biological limit values | |
| Local name | Xilenos |
| BEI | 1.5 g/g creatinine Parâmetro: Ácido metilhipúrico - Meio: Urina - Momento de amostragem: Final de jornada de trabalho. |
| Remark | Interpretação: IBE/EE - Indicadores Biológicos de Exposição Excessiva. |
| Regulatory reference | NR 7 - PCMSO |
| USA - ACGIH - Occupational Exposure Limits | |
| Local name | Xylene, mixed isomers (Dimethylbenzene) |
| ACGIH OEL TWA [ppm] | 20 ppm |
| ACGIH OEL STEL [ppm] | 150 ppm |
| Remark (ACGIH) | TLV® Basis: URT & eye irr; hematologic eff; ototoxicity (for mixtures containing p-xylene); CNS impair. Notations: OTO (for mixtures containing p-xylene); A4 (Not classifiable as a Human Carcinogen); BEI |
| Regulatory reference | ACGIH 2024 |
| USA - ACGIH - Biological Exposure Indices | |
| Local name | XYLENES (Technical or commercial grade) |
| BEI | 1.5 g/g creatinine Parameter: Methylhippuric acids - Medium: urine - Sampling time: End of shift |
| Regulatory reference | ACGIH 2024 |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

8.2. Appropriate engineering controls

| | |
|----------------------------------|---|
| Appropriate engineering controls | : Avoid the formation of mists in the atmosphere. Either local exhaust or general room ventilation is usually required. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Use only non-sparking tools. |
| Environmental exposure controls | : Avoid release to the environment. |

8.3. Individual protection measures

Hand protection:

Protective gloves made of rubber or PVC

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Long sleeved protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. An approved organic vapour respirator/supplied air or self-contained breathing apparatus must be used when vapour concentration exceeds applicable exposure limits. [In case of inadequate ventilation] wear respiratory protection.

Other information:

Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Basic physical and chemical properties

| | |
|---|---|
| Physical state | : Liquid |
| Colour | : Transparent, clear and without sediment |
| Odour | : Not available |
| Odour threshold | : Not available |
| pH | : Not applicable |
| Melting point | : Not available |
| Freezing point | : Not available |
| Boiling point | : 135 – 235 °C |
| Flash point | : ≥ 28 °C |
| Relative evaporation rate (butylacetate=1) | : Not available |
| Flammability | : Not available |
| Explosive limits | : Not available |
| Vapour pressure | : Not available |
| Relative vapour density at 20°C | : Not available |
| Relative density | : Not available |
| Density | : 0,7 - 0,8 (20/4°C) |
| Solubility | : Not available |
| Partition coefficient n-octanol/water (Log Pow) | : Not available |
| Partition coefficient n-octanol/water (Log Kow) | : Not available |
| Auto-ignition temperature | : Not available |
| Decomposition temperature | : Not available |
| Viscosity, kinematic | : Not available |
| Viscosity, dynamic | : Not available |
| Particle size | : Not applicable |
| Particle size distribution | : Not applicable |
| Particle shape | : Not applicable |
| Particle aspect ratio | : Not applicable |
| Particle specific surface area | : Not applicable |

9.2. Data relevant with regard to physical hazard classes

No additional information available

9.3. Further safety characteristics

No additional information available

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

SECTION 10: Stability and reactivity

| | |
|------------------------------------|---|
| Chemical stability | : Flammable liquid and vapour. May form flammable/explosive vapour-air mixture. |
| Conditions to avoid | : Open flame. Overheating. Direct sunlight. Heat. Sparks. |
| Hazardous decomposition products | : Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases. |
| Incompatible materials | : Strong oxidizers. |
| Possibility of hazardous reactions | : Hazardous polymerization will not occur. |
| Reactivity | : Stable under normal conditions of use. |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| | |
|-----------------------------|--|
| Acute toxicity (oral) | : Harmful if swallowed. |
| Acute toxicity (dermal) | : May be harmful in contact with skin. |
| Acute toxicity (inhalation) | : Not available |

| Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction (68477-39-4) | |
|---|--|
| LD50 dermal rabbit | > 2000 mg/kg |
| ATE BR (oral) | 1753 mg/kg |
| Nonane (111-84-2) | |
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity) |
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat | 17 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 14 - 21 |
| LC50 Inhalation - Rat [ppm] | 3200 ppm/4h |
| Decane (124-18-5) | |
| LD50 oral rat | > 5000 mg/kg |
| LD50 oral | > 5000 mg/kg bodyweight Animal: |
| LD50 dermal rat | > 2000 mg/kg |
| LD50 dermal rabbit | ≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat | ≥ 6.1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |
| LC50 Inhalation - Rat [ppm] | > 1369 ppm (Exposure time: 8 h) |
| Benzene, ethylmethyl- (25550-14-5) | |
| ATE BR (oral) | 2500 mg/kg bodyweight |
| propylbenzene (103-65-1) | |
| LD50 oral rat | 6040 mg/kg |
| LD50 dermal rat | 10600 mg/kg |
| LC50 Inhalation - Rat | 422 g/m³ (Exposure time: 2 h) |
| 1,2,4-Trimethylcyclohexane (2234-75-5) | |
| ATE BR (oral) | 500 mg/kg bodyweight |
| Isopropylcyclohexane (696-29-7) | |
| LC50 Inhalation - Rat | > 5.04 mg/l/4h |
| octane; n-octane (111-65-9) | |
| LD50 oral rat | > 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity) |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| octane; n-octane (111-65-9) | |
|--|--|
| LD50 dermal rabbit | > 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity) |
| LC50 Inhalation - Rat | > 24.88 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity) |
| LC50 Inhalation - Rat (Dust/Mist) | 118 mg/l/4h |
| Isobutylcyclohexane (1678-98-4) | |
| ATE BR (oral) | 500 mg/kg bodyweight |
| Ethyl cyclohexane (1678-91-7) | |
| LD50 dermal rat | > 2000 mg/kg |
| Isobutylbenzene (538-93-2) | |
| LD50 dermal rat | > 2000 mg/kg |
| Benzene, 1,2,4-trimethyl- (95-63-6) | |
| LD50 oral rat | 3280 mg/kg |
| LD50 dermal rabbit | > 3160 mg/kg |
| LC50 Inhalation - Rat | 18 g/m³ (Exposure time: 4 h) |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| LC50 Inhalation - Rat | 24 g/m³ (Exposure time: 4 h) |
| cumene (98-82-8) | |
| LD50 oral rat | 1400 mg/kg |
| LD50 dermal rabbit | 12300 µl/kg |
| LC50 Inhalation - Rat [ppm] | > 3577 ppm (Exposure time: 6 h) |
| ATE BR (oral) | 2500 mg/kg bodyweight |
| Xylene (1330-20-7) | |
| LD50 oral rat | 3500 mg/kg |
| LD50 dermal rabbit | 1700 mg/kg |
| LC50 Inhalation - Rat | 29.08 mg/l/4h |
| LC50 Inhalation - Rat [ppm] | 5000 ppm/4h |
| p-Cymene (99-87-6) | |
| LD50 oral rat | 4750 mg/kg |
| LD50 oral | 4750 mg/kg |
| LD50 dermal rabbit | > 5000 mg/kg |
| LC50 Inhalation - Rat | > 9.7 mg/l (Exposure time: 5 h) |
| Skin corrosion/irritation | : Causes skin irritation. pH: Not applicable |
| Serious eye damage/irritation | : Causes serious eye irritation. pH: Not applicable |
| Respiratory or skin sensitisation | : Not available |
| Germ cell mutagenicity | : Not available |
| Carcinogenicity | : May cause cancer. |
| cumene (98-82-8) | |
| IARC group | 2B - Possibly carcinogenic to humans |
| National Toxicity Program (NTP) Status | Reasonably anticipated to be Human Carcinogen |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| | |
|--|---|
| Xylene (1330-20-7) | |
| IARC group | 3 - Not classifiable |
| Reproductive toxicity | : Suspected of damaging fertility or the unborn child. |
| STOT-single exposure | : May cause drowsiness or dizziness. May cause respiratory irritation. |
| Nonane (111-84-2) | |
| STOT-single exposure | May cause drowsiness or dizziness. |
| 3,3-Dimethyloctane (4110-44-5) | |
| STOT-single exposure | May cause respiratory irritation. |
| Benzene, ethylmethyl- (25550-14-5) | |
| STOT-single exposure | May cause drowsiness or dizziness. May cause respiratory irritation. |
| propylbenzene (103-65-1) | |
| STOT-single exposure | May cause respiratory irritation. |
| octane; n-octane (111-65-9) | |
| STOT-single exposure | May cause drowsiness or dizziness. |
| 3-methylheptane (589-81-1) | |
| STOT-single exposure | May cause drowsiness or dizziness. |
| 2-methylheptane (592-27-8) | |
| STOT-single exposure | May cause drowsiness or dizziness. |
| Ethyl cyclohexane (1678-91-7) | |
| STOT-single exposure | May cause drowsiness or dizziness. |
| Octane, 3,6-dimethyl- (15869-94-0) | |
| STOT-single exposure | May cause respiratory irritation. |
| Benzene, 1,2,4-trimethyl- (95-63-6) | |
| STOT-single exposure | May cause respiratory irritation. |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| STOT-single exposure | May cause respiratory irritation. |
| cumene (98-82-8) | |
| STOT-single exposure | May cause respiratory irritation. |
| Xylene (1330-20-7) | |
| STOT-single exposure | May cause respiratory irritation. |
| STOT-repeated exposure | : Not available |
| Nonane (111-84-2) | |
| NOAEL (oral, rat, 90 days) | 100 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| NOAEC (inhalation, rat, vapour, 90 days) | 24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study) |
| NOAEL (subchronic, oral, animal/male, 90 days) | 100 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| Decane (124-18-5) | |
| NOAEC (inhalation, rat, vapour, 90 days) | > 10.4 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study) |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| octane; n-octane (111-65-9) | |
|--|---|
| NOAEC (inhalation, rat, vapour, 90 days) | 24.3 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study) |
| Benzene, 1,2,4-trimethyl- (95-63-6) | |
| NOAEL (oral, rat, 90 days) | 600 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
| NOAEC (inhalation, rat, vapour, 90 days) | 1.8 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies) |
| Xylene (1330-20-7) | |
| STOT-repeated exposure | May cause damage to organs (Auditory system) through prolonged or repeated exposure (Inhalation, oral). |

Aspiration hazard : May be fatal if swallowed and enters airways.
Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

11.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : May cause cancer. Suspected of damaging fertility or the unborn child.
Symptoms/effects after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness. Aspiration of this material may cause chemical pneumonia.
Symptoms/effects after skin contact : May be harmful in contact with skin. Causes skin irritation.
Symptoms/effects after eye contact : Causes serious eye irritation.
Symptoms/effects after ingestion : Harmful if swallowed. May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute) : Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic) : Very toxic to aquatic life with long lasting effects.
Other information : Avoid release to the environment.

| Nonane (111-84-2) | |
|-------------------------------------|--|
| LC50 - Fish [1] | 1.125 mg/l Source: QSAR, ECHA |
| EC50 - Crustacea [1] | 0.2 mg/l Test organisms (species): Daphnia magna |
| LOEC (chronic) | 0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| Decane (124-18-5) | |
| EC50 - Crustacea [1] | 0.029 mg/l (Exposure time: 48 h - Species: Daphnia magna) |
| Isopropylcyclohexane (696-29-7) | |
| LC50 - Fish [1] | > 0.169 mg/l (Exposure time: 96 h - Species: Danio rerio [semi-static]) |
| octane; n-octane (111-65-9) | |
| LC50 - Fish [1] | 0.885 mg/l |
| EC50 - Crustacea [1] | 0.3 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 0.9 mg/l Source: ECHA |
| LOEC (chronic) | 0.32 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC (chronic) | 0.17 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |
| NOEC chronic fish | 0.028 mg/l |
| Benzene, 1,2,4-trimethyl- (95-63-6) | |
| LC50 - Fish [1] | 7.19 – 8.28 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 - Crustacea [1] | 6.14 mg/l (Exposure time: 48 h - Species: Daphnia magna) |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| Benzene, 1,2,4-trimethyl- (95-63-6) | |
|---|--|
| EC50 96h - Algae [1] | 2.356 mg/l Test organisms (species): other:Green algae |
| 1,3,5-Trimethylbenzene (108-67-8) | |
| LC50 - Fish [1] | 3.48 mg/l (Exposure time: 96 h - Species: Pimephales promelas) |
| cumene (98-82-8) | |
| LC50 - Fish [1] | 6.04 – 6.61 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| LC50 - Fish [2] | 4.8 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through]) |
| EC50 - Crustacea [2] | 7.9 – 14.1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) |
| Xylene (1330-20-7) | |
| LC50 - Fish [1] | 13.4 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 - Crustacea [1] | 3.82 mg/l (Exposure time: 48 h - Species: water flea) |
| LC50 - Fish [2] | 2.661 – 4.093 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static]) |
| EC50 - Crustacea [2] | 0.6 mg/l (Exposure time: 48 h - Species: Gammarus lacustris) |
| NOEC (acute) | 0.44 mg/l 72 hours |
| p-Cymene (99-87-6) | |
| LC50 - Fish [1] | 48 mg/l Test organisms (species): Cyprinodon variegatus |
| EC50 - Crustacea [1] | 3.7 mg/l Test organisms (species): Daphnia magna |
| EC50 72h - Algae [1] | 4.03 mg/l Test organisms (species): Scenedesmus capricornutum |
| EC50 72h - Algae [2] | 2.01 mg/l Test organisms (species): Scenedesmus capricornutum |
| EC50 96h - Algae [1] | 22 mg/l Source: The ECOTOXicology database |
| NOEC chronic crustacea | 0.46 mg/l |
| 12.2. Persistence and degradability | |
| No additional information available | |
| 12.3. Bioaccumulative potential | |
| Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction (68477-39-4) | |
| Partition coefficient n-octanol/water (Log Pow) | 3.5 – 6.5 |
| Bioaccumulative potential | Not established. |
| Nonane (111-84-2) | |
| Partition coefficient n-octanol/water (Log Pow) | 5.65 Source: HSDB |
| Decane (124-18-5) | |
| Partition coefficient n-octanol/water (Log Pow) | 5.1 (at 20 °C) |
| Isopropylcyclohexane (696-29-7) | |
| Partition coefficient n-octanol/water (Log Pow) | 6 (at 25 °C (at pH 7.4) |
| octane; n-octane (111-65-9) | |
| Partition coefficient n-octanol/water (Log Pow) | 5.18 Source: HSDB |
| Ethyl cyclohexane (1678-91-7) | |
| Partition coefficient n-octanol/water (Log Pow) | 4.56 (at 25 °C) |
| Isobutylbenzene (538-93-2) | |
| BCF - Fish [1] | (1000 dimensionless) |
| Partition coefficient n-octanol/water (Log Pow) | 4.8 (at 23 °C (at pH 6) |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| Benzene, 1,2,4-trimethyl- (95-63-6) | |
|---|-------------------------|
| Partition coefficient n-octanol/water (Log Pow) | 3.63 |
| cumene (98-82-8) | |
| BCF - Fish [1] | 35.5 |
| Partition coefficient n-octanol/water (Log Pow) | 3.55 (at 23 °C) |
| Xylene (1330-20-7) | |
| BCF - Fish [1] | 0.6 – 15 |
| Partition coefficient n-octanol/water (Log Pow) | 2.77 – 3.15 |
| p-Cymene (99-87-6) | |
| Partition coefficient n-octanol/water (Log Pow) | 4.8 (at 20 °C (at pH 7) |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects




Hazardous to the ozone layer : Not available
Effect on the ozone layer : No additional information available.
Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations : Dispose of in a safe manner in accordance with local/national regulations. Dispose of contents/container to comply with applicable local, national and international regulation..
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

National and international Regulations

| ANTT | IMDG | IATA |
|---|---|--|
| UN number | | |
| 1268 | 1268 | 1268 |
| UN Proper Shipping Name | | |
| PETROLEUM DISTILLATES, N.O.S. (Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction) | PETROLEUM DISTILLATES, N.O.S. (Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction) | Petroleum distillates, n.o.s. (Distillates, petroleum, cracked stripped steam-cracked petroleum distillates, C8-10 fraction) |
| Primary risk class/subclass | | |
| 3 | 3 | 3 |
| Subsidiary risk class/subclass | | |
| Not applicable | Not applicable | Not applicable |
| Hazard labels | | |
| 3 | 3 | 3 |
|  |  |  |
| Risk identification number | | |
| 30 | Not applicable | Not applicable |
| Packing group | | |
| III | III | III |

White Spirit

Safety Data Sheet

According to ABNT NBR 14725: 2023

| ANTT | IMDG | IATA |
|---|---|----------------|
| Environmental hazards | | |
| Yes | Yes Marine Pollutant: Yes | Yes |
| Maritime transport in bulk according to MARPOL 73/78 and IBC Code | | |
| Not applicable | Produto name: RESIN OIL, DISTILLED Pollution category: Y Ship type: 2 | Not applicable |

14.2 Other information

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 US DOT, 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.

SECTION 15: Regulatory information

15.1. National regulations

No additional information available

SECTION 16: Other information

Other information : None.

Braskem - SDS_Brazil (modified 230209)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It warns that the handling of any chemical substance requires the previous knowledge of its hazards for the user. It is up to the user of the product company providing this SDS to and promote the training of its employees about possible risks come upon of the product. The information contained herein is not absolute, but only general information on the use of the chemical and indication of safety and security measures.