demsa

Dry Chemical Powders

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Demsa ABC Safety Sheet

Product and Material Safety Data Sheet:
Demsa ABC 40 - **Demsa ABC 55** - **Demsa ABC 75** - **Demsa ABC 90**
Dry Chemical Powders

Fire Classes:
ABC - USA standards / **AB(E)** - EEC standards.

1. Identification of the Substance and of the Company Undertaking

Product Name:
Demsa ABC 40 - **Demsa ABC 55** - **Demsa ABC 60** - **Demsa ABC 75** - **Demsa ABC 90**

Product Description:
Dry Chemical Fire Extinguisher Recharge - Fire Extinguishing Agent.

Manufacturer/Supplier:
Industrias Químicas Dem S.A.

Address:
Ruta 9 Km 79 - Campana (2804) - Buenos Aires - Argentina - Tel: (+54) (3489) 495 000 al 495 099
comercial@demsa.com.ar - www.demsa.com.ar

Safety Data Sheet according to EC directive 2001/59/EC and OSHA´s Hazcom Standard (29 CFR 1910.1200).

2. Hazards Identification

No hazardous material

SIDE EFFECTS	
Routes of Exposure	Eye contact - Skin contact - Inhalation.
Target Organs	Eye - Skin - Respiratory System.
Health Effects - Eyes	Contact for short periods of time may cause irritation.
Health Effects - Skin	Contact may cause mild irritation.
Health Effects - Ingestion	Ingestion is not an expected route of exposure.
Health Effects - Inhalation	May irritate the respiratory tract. May cause transient cough and shortness of breath.

Medical conditions which may be aggravated by inhalation or dermal exposure: Persons with unusual (hyper) sensitivity to such chemicals may experience adverse reactions to this product.

Carcinogenic potential: This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

3. First Aid Measures

Eyes: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin: Wash affected area with soap and water. Obtain medical attention if irritation persists.

Ingestion: Dilute by drinking large quantities of water and obtain medical attention.

Inhalation: Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.
Advice to Physicians: Treat symptomatically.

Advice to the doctors: To treat in agreement to the symptomatology.

4. Composition / Information on ingredientes

Chemical Name	%	CAS Number	EC Number	Class
Monoammonium Phosphate	40-90	7722-76-1	231-764-1	Not listed
Ammonium Sulfate	5-55	7783-20-2	231-984-2	Not listed
Methylhydrogen Polysiloxane	0.4-1.4	69037-59-2	Not listed	R:36.37.38
Silica	0.4-1.4	7631-86-9	231-545-4	Not listed
Others	1.4	No specify	No specify	No specify

5. Fire Fighting Measures

Extinguishing Media
This preparation is used as an extinguishing agent and therefore is not flammable. Use extinguishing agent appropriate to other materials involved.

This extinguishing agent is mainly used inside pressurized fire extinguishers. Keep pressurized extinguishers and surroundings cool as they may rupture or explode in the heat of a fire.

Protective Equipment for Fire-Fighting: Wear full protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. Accidental Release Measures

Sweep up or vacuum. Prevent skin and eye contact. Wear appropriate protective equipment. To remove the product rapidly from other incompatible products (alkaline materials and caustic products).

7. Storage

When stored in bulk:

Keep in its original container or appropriate end-use container. Storage area should be cool, dry, well ventilated, under cover and out of direct sunlight. The powder's integrity depends on the prevalent storage conditions.

It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

When inside pressurized extinguishers:

Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher. Store pressurized extinguishers and plastic containers away from high heat sources.

8. Handling - Exposure controls and personal protection

Engineering Control Measures:

Use with adequate ventilation. There should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

Respiratory Protection:

Use dust mask where dustiness is prevalent, or TLV is exceeded. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced.

Skin Protection - Hand and Body Protection:

Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Hand protection is not normally needed when used in a portable fire extinguisher.

Eye Protection:

Chemical goggles or safety glasses with side shields.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. Physical and chemical properties

PHYSICAL STATE	SOLID POWDER
Color	Yellow: ABC 40, ABC 55, ABC 75, ABC 90 Green: ABC 60
Odor	Odorless
Specific Gravity (H_2O=1):	>0.85 g/m^3
PH	6.0/7.5
Boiling Range/Point (°C/°F)	200°C/392F°
Flash Point (PMCC) (°C/F)	Not flammable
Solubility in Water	Not soluble
Vapor Density (Air = 1)	Heavier than air
Vapor Pressure	Not applicable
Evaporation Rate	Not applicable

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10. Stability and reactivity

Stability: Stable under normal conditions.

Conditions to Avoid: Heat - High temperatures - Exposure to direct sunlight.

Materials to Avoid: Strong oxidizing agents - strong acids - sodium hypochlorite.
Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon, ammonia, oxides of phosphorus, nitrogen oxides.

11. Toxicological information

Acute Toxicity: Low order of acute toxicity.

Chronic Toxicity: This product is not expected to cause long term adverse health effects. Mica and clay may contain small quantities of quartz (crystalline silica) as an impurity.
Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis.

Genotoxicity: This product is not expected to cause any mutagenic effects.

Reproductive & Developmental Toxicity: This product is not expected to cause adverse reproductive effects.

12. Ecological information

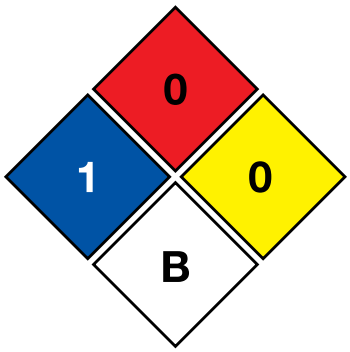
Mobility: No relevant studies identified.
Persistence/Degradability: No relevant studies identified.
Bio-accumulation: No relevant studies identified.
Ecotoxicity: No relevant studies identified.

13. Disposal considerations

Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. No harm to the environment is expected from this preparation.

14. Regulatory information

Label Requirements



Health (Blue): 1
Flammability (Red): 0
Physical Hazard (Yellow): 0
Personal Protection (White): B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Protective Equipment: B (Safety glasses, gloves)

WARNING: MAY CAUSE EYE AND/OR SKIN IRRITATION

EEC regulations
Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC)
EU Risk (R) and Safety (S) Phrases -

R22 - Harmful if swallowed
R36/37/38 - Irritating to eyes, respiratory system and skin.
S2 - Keep out of the reach of children
S24/25 - Avoid contact with skin and eyes
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 - After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.

S46 - If swallowed, seek medical advice immediately and show this container or label.

EEUU regulations
OSHA Hazard Communication Standard, 29 CFR 1910.1200
This product is not considered a "hazardous chemical" under this regulation but could be included in the employer's hazard communication program.

15. Abbreviations used in this safety sheet
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety

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

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Demsa ABC 40 - Dry Chemical Extinguishing Powder

1. General Features

Demsa ABC 40 is an efficient ABC type dry chemical extinguishing powder. It is based on mono-ammonium phosphate, the best known and effective multipurpose extinguishing agent. The active ingredient is mixed with silicone additives to improve their fluency and makes it resistant to extreme weather conditions. **Demsa ABC 40** is foam agent compatible.

2. Applications

Demsa ABC 40 is a multipurpose fire extinguisher powder. It is used in:
Class A fires: Fires originated by solid combustibles such as wood, paper, fabric, plastic, and most kinds of trash.

Class B (US std.) - Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas

Class C (US std.) - Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa ABC 40 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa ABC 40 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our ABC Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa ABC 40 is a light yellow, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa ABC 40** are:
- 20 kg polyethylene plastic pail
- 25 kg polyethylene double bag
- 1000 kg bulk big bag

The packages are shipped in non- returnable pallets and managed with polyethylene film.

6. Storage

Demsa ABC 40 is formulated for long term storage; it may last up to five years without losing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#50 (300µm)	0
#100 (150µm)	0-6
#200 (75µm)	14-26
#325 (45µm)	34-46
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Monoammonium phosphate concentration %	40 %

8. Quality assurance and approvals

Demsa ABC 40 is manufactured and certified under ISO 9001/2008 international standard.
Demsa ABC 40 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa ABC 40 meets EN 615 - EEC standards
Demsa ABC 40 is certified under IRAM 3569/2009

The information given in this Product Data Sheet is indicative only and does not constitute a guarantee. The manufacture of this product has been carried out under strict control and no risk will be incurred if it is handled and used according to the instructions given. As no control can be exercised over its use, Industrias Químicas Dem S.A. cannot accept responsibility for any damage which may result from its misuse.

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Demsa ABC 55 - Dry Chemical Extinguishing Powder

1. General Features

Demsa ABC 55 is an efficient ABC type dry chemical extinguishing powder. It is based on mono-ammonium phosphate, the best known and effective multipurpose extinguishing agent. The active ingredient is mixed with silicone additives to improve their fluency and makes it resistant to extreme weather conditions. **Demsa ABC 55** is foam agent compatible.

2. Applications

Demsa ABC 55 is a multipurpose fire extinguisher powder. It is used in:
Class A fires: Fires originated by solid combustibles such as wood, paper, fabric, plastic, and most kinds of trash.

Class B (US std.) - Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas

Class C (US std.) - Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa ABC 55 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa ABC 55 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our ABC Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa ABC 55 is a light yellow, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa ABC 55** are:
- 20 kg polyethylene plastic pail
- 25 kg polyethylene double bag
- 1000 kg bulk big bag

The packages are shipped in non- returnable pallets and managed with polyethylene film.

6. Storage

Demsa ABC 55 is formulated for long term storage; it may last up to five years without losing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#50 (300µm)	0
#100 (150µm)	0-6
#200 (75µm)	14-26
#325 (45µm)	34-46
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Monoammonium phosphate concentration %	55 %

8. Quality assurance and approvals

Demsa ABC 55 is manufactured and certified under ISO 9001/2008 international standard.
Demsa ABC 55 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa ABC 55 meets EN 615 - EEC standards
Demsa ABC 55 is certified under IRAM 3569/2009

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Demsa ABC 60 - Dry Chemical Extinguishing Powder

1. General Features

Demsa ABC 60 is an efficient ABC type dry chemical extinguishing powder. It is based on mono-ammonium phosphate, the best known and effective multipurpose extinguishing agent. The active ingredient is mixed with silicone additives to improve their fluency and makes it resistant to extreme weather conditions. **Demsa ABC 60** is foam agent compatible.

2. Applications

Demsa ABC 60 is a multipurpose fire extinguisher powder. It is used in:
Class A fires: Fires originated by solid combustibles such as wood, paper, fabric, plastic, and most kinds of trash.

Class B (US std.) - Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas

Class C (US std.) - Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa ABC 60 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa ABC 60 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our ABC Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa ABC 60 is a green, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa ABC 60** are:
- 20 kg polyethylene plastic pail
- 25 kg polyethylene double bag
- 1000 kg bulk big bag

The packages are shipped in non- returnable pallets and managed with polyethylene film.

6. Storage

Demsa ABC 60 is formulated for long term storage; it may last up to five years without losing its efficiency.
However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#50 (300µm)	0
#100 (150µm)	0-6
#200 (75µm)	14-26
#325 (45µm)	34-46
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Monoammonium phosphate concentration %	60 %

8. Quality assurance and approvals

Demsa ABC 60 is manufactured and certified under ISO 9001/2008 international standard.
Demsa ABC 60 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa ABC 60 meets EN 615 - EEC standards
Demsa ABC 60 is certified under IRAM 3569/2009

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Demsa ABC 75 - Dry Chemical Extinguishing Powder

1. General Features

Demsa ABC 75 is an efficient ABC type dry chemical extinguishing powder. It is based on mono-ammonium phosphate, the best known and effective multipurpose extinguishing agent. The active ingredient is mixed with silicone additives to improve their fluency and makes it resistant to extreme weather conditions. **Demsa ABC 75** is foam agent compatible.

2. Applications

Demsa ABC 75 is a multipurpose fire extinguisher powder. It is used in:
Class A fires: Fires originated by solid combustibles such as wood, paper, fabric, plastic, and most kinds of trash.

Class B (US std.) - Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas

Class C (US std.) - Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa ABC 75 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa ABC 75 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our ABC Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa ABC 75 is a light yellow, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa ABC 75** are:
- 20 kg polyethylene plastic pail
- 25 kg polyethylene double bag
- 1000 kg bulk big bag

The packages are shipped in non- returnable pallets and managed with polyethylene film.

6. Storage

Demsa ABC 75 is formulated for long term storage; it may last up to five years without losing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#50 (300µm)	0
#100 (150µm)	0-6
#200 (75µm)	14-26
#325 (45µm)	34-46
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Monoammonium phosphate concentration %	75 %

8. Quality assurance and approvals

Demsa ABC 75 is manufactured and certified under ISO 9001/2008 international standard.
Demsa ABC 75 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa ABC 75 meets EN 615 - EEC standards
Demsa ABC 75 is certified under IRAM 3569/2009

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Demsa ABC 90 - Dry Chemical Extinguishing Powder

1. General Features

Demsa ABC 90 is an efficient ABC type dry chemical extinguishing powder. It is based on mono-ammonium phosphate, the best known and effective multipurpose extinguishing agent. The active ingredient is mixed with silicone additives to improve their fluency and makes it resistant to extreme weather conditions. **Demsa ABC 90** is foam agent compatible.

2. Applications

Demsa ABC 90 is a multipurpose fire extinguisher powder. It is used in:
Class A fires: Fires originated by solid combustibles such as wood, paper, fabric, plastic, and most kinds of trash.

Class B (US std.) - Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas

Class C (US std.) - Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa ABC 90 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa ABC 90 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our ABC Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa ABC 90 is a light yellow, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa ABC 90** are:
- 20 kg polyethylene plastic pail
- 25 kg polyethylene double bag
- 1000 kg bulk big bag

The packages are shipped in non- returnable pallets and managed with polyethylene film.

6. Storage

Demsa ABC 90 is formulated for long term storage; it may last up to five years without losing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#50 (300µm)	0
#100 (150µm)	0-6
#200 (75µm)	14-26
#325 (45µm)	34-46
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Monoammonium phosphate concentration %	90 %

8. Quality assurance and approvals

Demsa ABC 90 is manufactured and certified under ISO 9001/2008 international standard.
Demsa ABC 90 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa ABC 90 meets EN 615 - EEC standards
Demsa ABC 90 is certified under IRAM 3569/2009

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Sheet Revision Date: January 5, 2015

Demsa BC STD Safety Sheet

Product and Material Safety Data Sheet:
Demsa BC STD
Dry Chemical Powders

Fire Classes:
BC - USA standards / **AB(E)** - EEC standards.

1. Identification of the Substance and of the Company Undertaking

Product Name:
Demsa BC STD

Product Description:
Dry Chemical Fire Extinguisher Recharge - Fire Extinguishing Agent.

Manufacturer/Supplier:
Industrias Químicas Dem S.A.

Address:
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comercial@demsa.com.ar - www.demsa.com.ar

Safety Data Sheet according to EC directive 2001/59/EC and OSHA´s Hazcom Standard (29 CFR 1910.1200).

2. Hazards Identification

No hazardous material

SIDE EFFECTS	
Routes of Exposure	Eye contact - Skin contact - Inhalation.
Target Organs	Eye - Skin - Respiratory System.
Health Effects - Eyes	Contact for short periods of time may cause irritation.
Health Effects - Skin	Contact may cause mild irritation.
Health Effects - Ingestion	Ingestion is not an expected route of exposure.
Health Effects - Inhalation	May irritate the respiratory tract. May cause transient cough and shortness of breath.

Medical conditions which may be aggravated by inhalation or dermal exposure: Persons with unusual (hyper) sensitivity to such chemicals may experience adverse reactions to this product.

Carcinogenic potential: This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

3. First Aid Measures

Eyes: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin: Wash affected area with soap and water. Obtain medical attention if irritation persists.

Ingestion: Dilute by drinking large quantities of water and obtain medical attention.

Inhalation: Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.
Advice to Physicians: Treat symptomatically.

Advice to the doctors: To treat in agreement to the symptomatology.

4. Composition / Information on ingredientes

Chemical Name	%	CAS Number	EC Number	Class
Sodium Bicarbonate	85-95	144-55-8	205-633-8	Not listed
Others	<15	Not listed	Not listed	Not listed

5. Fire Fighting Measures

Extinguishing Media
This preparation is used as an extinguishing agent and therefore is not flammable. Use extinguishing agent appropriate to other materials involved.
This extinguishing agent is mainly used inside pressurized fire extinguishers. Keep pressurized extinguishers and surroundings cool as they may rupture or explode in the heat of a fire.

Protective Equipment for Fire-Fighting: Wear full

protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. Accidental Release Measures

Sweep up or vacuum. Prevent skin and eye contact. Wear appropriate protective equipment. To remove the product rapidly from other incompatible products (alkaline materials and caustic products).

7. Storage

When stored in bulk:

Keep in its original container or appropriate end-use container. Storage area should be cool, dry, well ventilated, under cover and out of direct sunlight. The powder's integrity depends on the prevalent storage conditions.

It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

When inside pressurized extinguishers:

Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher. Store pressurized extinguishers and plastic containers away from high heat sources.

8. Handling - Exposure controls and personal protection

Engineering Control Measures:

Use with adequate ventilation. There should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

Respiratory Protection:

Use dust mask where dustiness is prevalent, or TLV is exceeded. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced.

Skin Protection - Hand and Body Protection:

Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Hand protection is not normally needed when used in a portable fire extinguisher.

Eye Protection:

Chemical goggles or safety glasses with side shields.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. Physical and chemical properties

PHYSICAL STATE	SOLID POWDER
Color	Red
Odor	Odorless
Specific Gravity (H_2O=1):	>0.85 g/m^3
PH	6.0/7.5
Boiling Range/Point (°C/F)	Not applicable
Flash Point (PMCC) (°C/F)	Not Flammable
Solubility in Water	Not soluble
Vapor Density (Air = 1)	Heavier than air
Vapor Pressure	Not applicable
Evaporation Rate	Not applicable

10. Stability and reactivity

Stability: Stable under normal conditions.

Conditions to Avoid: Heat - High temperatures - Exposure to direct sunlight.

Materials to Avoid: Strong oxidizing agents - strong acids - sodium hypochlorite.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon.

11. Toxicological information

Acute Toxicity: Low order of acute toxicity.

Chronic Toxicity: This product is not expected to cause long term adverse health effects. Mica and clay may contain small quantities of quartz (crystalline silica) as an impurity.
Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis.

Genotoxicity: This product is not expected to cause any mutagenic effects.

Reproductive & Developmental Toxicity: This product is not expected to cause adverse reproductive effects.

12. Ecological information

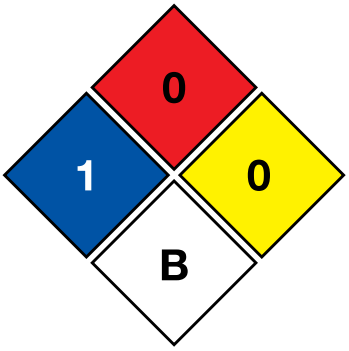
Mobility: No relevant studies identified.
Persistence/Degradability: No relevant studies identified.
Bio-accumulation: No relevant studies identified.
Ecotoxicity: No relevant studies identified.

13. Disposal considerations

Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. No harm to the environment is expected from this preparation.

14. Regulatory information

Label Requirements



Health (Blue): 1
Flammability (Red): 0
Physical Hazard (Yellow): 0
Personal Protection (White): B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Protective Equipment: B (Safety glasses, gloves)

WARNING: MAY CAUSE EYE AND/OR SKIN IRRITATION

EEC regulations

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC)
EU Risk (R) and Safety (S) Phrases -

R22 - Harmful if swallowed
R36/37/38 - Irritating to eyes, respiratory system and skin.
S2 - Keep out of the reach of children
S24/25 - Avoid contact with skin and eyes
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 - After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.

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S46 - If swallowed, seek medical advice immediately and show this container or label.

EEUU regulations
OSHA Hazard Communication Standard, 29 CFR 1910.1200
This product is not considered a "hazardous chemical" under this regulation but could be included in the employer's hazard communication program.

15. Abbreviations used in this safety sheet
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety

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

Sheet Revision Date: January 5, 2015

Demsa BC STD - Dry Chemical Extinguishing Powder

1. General Features

Demsa BC STD is an efficient BC type dry chemical extinguishing powder. It is based on sodium bicarbonate. The active ingredient is mixed with additives (hydrophobic ingredients based on silicone) for improving its fluidity and making it resistant to extreme weather conditions. **Demsa BC STD** is AFFF foam compatible.

2. Applications

Demsa BC STD is used in:
Class B (US std.) – Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas.

Class C (US std.) – Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa BC STD is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa BC STD does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our **Demsa BC STD** Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa BC STD is a white, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa BC STD** are:
– 20 kg polyethylene bucket (plastic pail)
– 25 kg polyethylene double bag
– 1000 kg bulk big bag

6. Storage

Demsa BC STD is formulated for long term storage; it may last up to five years without loosing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C / 35°F to 120°F (ideal storing temperature is 20°C+- 2°C / 64.4°F to 71.6°F), dry places (60% +- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#40 (425µm)	0
#100 (150µm)	0-6
#200 (75µm)	3-15
#325 (45µm)	18-30
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Sodium Bicarbonate concentration %	>=85,50

8. Quality assurance and approvals

Demsa BC STD is manufactured under ISO 9001:2008 international standard.
Demsa BC STD is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa BC STD meets EN 615 – EEC standards.

The information given in this Product Data Sheet is indicative only and does not constitute a guarantee. The manufacture of this product has been carried out under strict control and no risk will be incurred if it is handled and used according to the instructions given. As no control can be exercised over its use, Industrias Químicas Dem S.A. cannot accept responsibility for any damage which may result from its misuse.

Sheet Revision Date: January 5, 2015

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Demsa BC Púrpura K Safety Sheet

Product and Material Safety Data Sheet:
Demsa BC Púrpura K
Dry Chemical Powders

Fire Classes:
BC - USA standards / **AB(E)** - EEC standards.

1. Identification of the Substance and of the Company Undertaking

Product Name:
Demsa BC Púrpura K

Product Description:
Dry Chemical Fire Extinguisher Recharge - Fire Extinguishing Agent.

Manufacturer/Supplier:
Industrias Químicas Dem S.A.

Address:
Ruta 9 Km 79 - Campana (2804) - Buenos Aires - Argentina - Tel: (+54) (3489) 495 000 al 495 099
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Safety Data Sheet according to EC directive 2001/59/EC and OSHA´s Hazcom Standard (29 CFR 1910.1200).

2. Hazards Identification

No hazardous material

SIDE EFFECTS	
Routes of Exposure	Eye contact - Skin contact - Inhalation.
Target Organs	Eye - Skin - Respiratory System.
Health Effects - Eyes	Contact for short periods of time may cause irritation.
Health Effects - Skin	Contact may cause mild irritation.
Health Effects - Ingestion	Ingestion is not an expected route of exposure.
Health Effects - Inhalation	May irritate the respiratory tract. May cause transient cough and shortness of breath.

Medical conditions which may be aggravated by inhalation or dermal exposure: Persons with unusual (hyper) sensitivity to such chemicals may experience adverse reactions to this product.

Carcinogenic potential: This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

3. First Aid Measures

Eyes: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin: Wash affected area with soap and water. Obtain medical attention if irritation persists.

Ingestion: Dilute by drinking large quantities of water and obtain medical attention.

Inhalation: Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.
Advice to Physicians: Treat symptomatically.

Advice to the doctors: To treat in agreement to the symptomatology.

4. Composition / Information on ingredientes

Chemical Name	%	CAS Number	EC Number	Class
Potassium Bicarbonate	85-95	298-14-6	206-059-0	Not listed
Others	<15	Not listed	Not listed	Not listed

5. Fire Fighting Measures

Extinguishing Media
This preparation is used as an extinguishing agent and therefore is not flammable. Use extinguishing agent appropriate to other materials involved.
This extinguishing agent is mainly used inside pressurized fire extinguishers. Keep pressurized extinguishers and surroundings cool as they may rupture or explode in the heat of a fire.

Protective Equipment for Fire-Fighting: Wear full

protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. Accidental Release Measures

Sweep up or vacuum. Prevent skin and eye contact. Wear appropriate protective equipment. To remove the product rapidly from other incompatible products (alkaline materials and caustic products).

7. Storage

When stored in bulk:

Keep in its original container or appropriate end-use container. Storage area should be cool, dry, well ventilated, under cover and out of direct sunlight. The powder's integrity depends on the prevalent storage conditions.

It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

When inside pressurized extinguishers:

Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher. Store pressurized extinguishers and plastic containers away from high heat sources.

8. Handling - Exposure controls and personal protection

Engineering Control Measures:

Use with adequate ventilation. There should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

Respiratory Protection:

Use dust mask where dustiness is prevalent, or TLV is exceeded. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced.

Skin Protection - Hand and Body Protection:

Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Hand protection is not normally needed when used in a portable fire extinguisher.

Eye Protection:

Chemical goggles or safety glasses with side shields.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. Physical and chemical properties

PHYSICAL STATE	SOLID POWDER
Color	Purple
Odor	Odorless
Specific Gravity (H2O=1):	>0.85 g/m3
PH	8.0/9.0
Boiling Range/Point (°C/F)	> 500°C
Flash Point (PMCC) (°C/F)	Not Flammable
Solubility in Water	Not soluble
Vapor Density (Air = 1)	Heavier than air
Vapor Pressure	Not applicable
Evaporation Rate	Not applicable

10. Stability and reactivity

Stability: Stable under normal conditions.

Conditions to Avoid: Heat - High temperatures -

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Exposure to direct sunlight.

Materials to Avoid: Strong oxidizing agents - strong acids - sodium hypochlorite.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon.

11. Toxicological information

Acute Toxicity: Low order of acute toxicity.

Chronic Toxicity: This product is not expected to cause long term adverse health effects. Mica and clay may contain small quantities of quartz (crystalline silica) as an impurity.
Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis.

Genotoxicity: This product is not expected to cause any mutagenic effects.

Reproductive & Developmental Toxicity: This product is not expected to cause adverse reproductive effects.

12. Ecological information

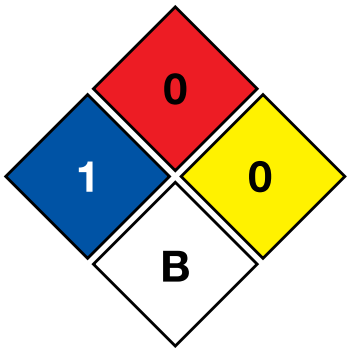
Mobility: No relevant studies identified.
Persistence/Degradability: No relevant studies identified.
Bio-accumulation: No relevant studies identified.
Ecotoxicity: No relevant studies identified.

13. Disposal considerations

Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. No harm to the environment is expected from this preparation.

14. Regulatory information

Label Requirements



Health (Blue): 1
Flammability (Red): 0
Physical Hazard (Yellow): 0
Personal Protection (White): B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Protective Equipment: B (Safety glasses, gloves)

WARNING: MAY CAUSE EYE AND/OR SKIN IRRITATION

EEC regulations

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC)
EU Risk (R) and Safety (S) Phrases -

R22 - Harmful if swallowed
R36/37/38 - Irritating to eyes, respiratory system and skin.
S2 - Keep out of the reach of children
S24/25 - Avoid contact with skin and eyes
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 - After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.

S46 - If swallowed, seek medical advice immediately and show this container or label.

EEUU regulations
OSHA Hazard Communication Standard, 29 CFR 1910.1200
This product is not considered a "hazardous chemical" under this regulation but could be included in the employer's hazard communication program.

15. Abbreviations used in this safety sheet

CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety

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Sheet Revision Date: January 5, 2015

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Demsa BC Púrpura K - Dry Chemical Extinguishing Powder

1. General Features

Demsa BC Púrpura K is an efficient BC type dry chemical extinguishing powder. It is based on potassium bicarbonate. The active ingredient is mixed with additives (hydrophobic ingredients based on silicone) for improving its fluidity and making it resistant to extreme weather conditions. **Demsa BC Púrpura K** is AFFF foam compatible.

2. Applications

Demsa BC Púrpura K is used in:
Class B (US std.) – Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas.

Class C (US std.) – Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa BC Púrpura K is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa BC Púrpura K does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our **Demsa BC Púrpura K** Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa BC Púrpura K is a purple, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa BC Púrpura K** are:
– 20 kg polyethylene bucket (plastic pail)
– 25 kg polyethylene double bag
– 1000 kg bulk big bag

6. Storage

Demsa BC Púrpura K is formulated for long term storage; it may last up to five years without loosing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C / 35°F to 120°F (ideal storing temperature is 20°C+- 2°C / 64.4°F to 71.6°F), dry places (60% +- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#40 (425µm)	0
#100 (150µm)	0-6
#200 (75µm)	4-16
#325 (45µm)	18-30
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Potassium Bicarbonate concentration %	>=85,50

8. Quality assurance and approvals

Demsa BC Púrpura K is manufactured under ISO 9001:2008 international standard.
Demsa BC Púrpura K is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa BC Púrpura K meets EN 615 – EEC standards.

The information given in this Product Data Sheet is indicative only and does not constitute a guarantee. The manufacture of this product has been carried out under strict control and no risk will be incurred if it is handled and used according to the instructions given. As no control can be exercised over its use, Industrias Químicas Dem S.A. cannot accept responsibility for any damage which may result from its misuse.

Sheet Revision Date: January 5, 2015

Demsa BC MI10 Safety Sheet

Product and Material Safety Data Sheet:
Demsa BC MI10
Dry Chemical Powders

Fire Classes:
BC - USA standards / **AB(E)** - EEC standards.

1. Identification of the Substance and of the Company Undertaking

Product Name:
Demsa BC MI10

Product Description:
Dry Chemical Fire Extinguisher Recharge - Fire Extinguishing Agent.

Manufacturer/Supplier:
Industrias Químicas Dem S.A.

Address:
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comercial@demsa.com.ar - www.demsa.com.ar

Safety Data Sheet according to EC directive 2001/59/EC and OSHA´s Hazcom Standard (29 CFR 1910.1200).

2. Hazards Identification

No hazardous material

SIDE EFFECTS	
Routes of Exposure	Eye contact - Skin contact - Inhalation.
Target Organs	Eye - Skin - Respiratory System.
Health Effects - Eyes	Contact for short periods of time may cause irritation.
Health Effects - Skin	Contact may cause mild irritation.
Health Effects - Ingestion	Ingestion is not an expected route of exposure.
Health Effects - Inhalation	May irritate the respiratory tract. May cause transient cough and shortness of breath.

Medical conditions which may be aggravated by inhalation or dermal exposure: Persons with unusual (hyper) sensitivity to such chemicals may experience adverse reactions to this product.

Carcinogenic potential: This product and its ingredients are not listed as a carcinogen by NTP, OSHA, ACGIH or IARC.

3. First Aid Measures

Eyes: Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin: Wash affected area with soap and water. Obtain medical attention if irritation persists.

Ingestion: Dilute by drinking large quantities of water and obtain medical attention.

Inhalation: Move victim to fresh air. Obtain medical attention immediately for any breathing difficulty.
Advice to Physicians: Treat symptomatically.

Advice to the doctors: To treat in agreement to the symptomatology.

4. Composition / Information on ingredientes

Chemical Name	%	CAS Number	EC Number	Class
Potassium Bicarbonate	85-95	298-14-6	206-059-0	Not Listed
Urea	3-7	57-13-6	200-315-5	Not Listed
Others	<12	Not Listed	Not Listed	Not Listed

5. Fire Fighting Measures

Extinguishing Media

This preparation is used as an extinguishing agent and therefore is not flammable. Use extinguishing agent appropriate to other materials involved.
This extinguishing agent is mainly used inside pressurized fire extinguishers. Keep pressurized extinguishers and surroundings cool as they may rupture or explode in the heat of a fire.

Protective Equipment for Fire-Fighting: Wear full

protective clothing and self-contained breathing apparatus as appropriate for specific fire conditions.

6. Accidental Release Measures

Sweep up or vacuum. Prevent skin and eye contact. Wear appropriate protective equipment. To remove the product rapidly from other incompatible products (alkaline materials and caustic products).

7. Storage

When stored in bulk:

Keep in its original container or appropriate end-use container. Storage area should be cool, dry, well ventilated, under cover and out of direct sunlight. The powder's integrity depends on the prevalent storage conditions.

It is highly recommended to store in temperatures between 4°C to 49°C/35°F to 120°F (ideal storing temperature is 20°C +/- 2°C/64.4°F to 71.6°F), dry places (60% +/- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

When inside pressurized extinguishers:

Pressurized extinguishers should be properly stored and secured to prevent falling or being knocked over. Do not drag, slide or roll extinguishers. Do not drop extinguishers or permit them to strike against each other. Never apply flame or localized heat directly to any part of the extinguisher. Store pressurized extinguishers and plastic containers away from high heat sources.

8. Handling - Exposure controls and personal protection

Engineering Control Measures:

Use with adequate ventilation. There should be local procedures for the selection, training, inspection and maintenance of this equipment. When used in large volumes, use local exhaust ventilation.

Respiratory Protection:

Use dust mask where dustiness is prevalent, or TLV is exceeded. NIOSH or MSHA approved particulate filter respirators should be used in the context of respiratory protection program meeting the requirements of the OSHA respiratory protection standard [29 CFR 1910.134] to control exposures when ventilation or other controls are inadequate or discomfort or irritation is experienced.

Skin Protection - Hand and Body Protection:

Skin contact should be minimized through use of latex gloves and suitable long sleeved clothing. Hand protection is not normally needed when used in a portable fire extinguisher.

Eye Protection:

Chemical goggles or safety glasses with side shields.

Work Practice Controls:

Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash exposed skin promptly to remove accidental splashes or contact with this material.

9. Physical and chemical properties

PHYSICAL STATE	SOLID POWDER
Color	White
Odor	Odorless
Specific Gravity (H_2O=1):	>0.85 g/m^3
PH	8.0/9.0
Boiling Range/Point (°C/F)	> 500°C
Flash Point (PMCC) (°C/F)	Not Flammable
Solubility in Water	Not soluble
Vapor Density (Air = 1)	Heavier than air
Vapor Pressure	Not applicable
Evaporation Rate	Not applicable

10. Stability and reactivity

Stability: Stable under normal conditions.

Conditions to Avoid: Heat - High temperatures - Exposure to direct sunlight.

Materials to Avoid: Strong oxidizing agents - strong acids - sodium hypochlorite.

Hazardous Polymerization: Will not occur.

Hazardous Decomposition Products: Oxides of carbon.

11. Toxicological information

Acute Toxicity: Low order of acute toxicity.

Chronic Toxicity: This product is not expected to cause long term adverse health effects. Mica and clay may contain small quantities of quartz (crystalline silica) as an impurity.
Prolonged exposure to respirable crystalline silica dust at concentrations exceeding the occupational exposure limits may increase the risk of developing a disabling lung disease known as silicosis.

Genotoxicity: This product is not expected to cause any mutagenic effects.

Reproductive & Developmental Toxicity: This product is not expected to cause adverse reproductive effects.

12. Ecological information

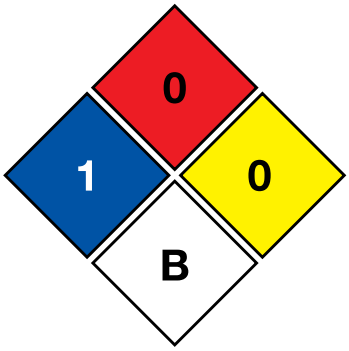
Mobility: No relevant studies identified.
Persistence/Degradability: No relevant studies identified.
Bio-accumulation: No relevant studies identified.
Ecotoxicity: No relevant studies identified.

13. Disposal considerations

Dispose of container in accordance with all applicable local and national regulations. Do not cut, puncture or weld on or near to the container. No harm to the environment is expected from this preparation.

14. Regulatory information

Label Requirements



Health (Blue): 1
Flammability (Red): 0
Physical Hazard (Yellow): 0
Personal Protection (White): B

NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
Protective Equipment: B (Safety glasses, gloves)

WARNING: MAY CAUSE EYE AND/OR SKIN IRRITATION

EEC regulations

Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments (2001/60/EC and 2006/8/EC)
EU Risk (R) and Safety (S) Phrases -

R22 - Harmful if swallowed
R36/37/38 - Irritating to eyes, respiratory system and skin.
S2 - Keep out of the reach of children
S24/25 - Avoid contact with skin and eyes
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S28 - After contact with skin, wash immediately with plenty of soap and water or a recognized skin cleaner
S36/37 - Wear suitable protective clothing and gloves.
S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S53 - Avoid exposure - obtain special instructions before use.

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S46 - If swallowed, seek medical advice immediately and show this container or label.

EEUU regulations
OSHA Hazard Communication Standard, 29 CFR 1910.1200
This product is not considered a “hazardous chemical” under this regulation but could be included in the employer’s hazard communication program.

15. Abbreviations used in this safety sheet
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration
TLV: Threshold Limit Value
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety

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

Sheet Revision Date: January 2, 2015

Demsa BC MI10 - Dry Chemical Extinguishing Powder

1. General Features

Demsa BC MI10 is an efficient BC type dry chemical extinguishing powder. It is based on potassium bicarbonate. The active ingredient is mixed with additives (hydrophobic ingredients based on silicone) for improving its fluidity and making it resistant to extreme weather conditions. **Demsa BC MI10** is AFFF foam compatible.

2. Applications

Demsa BC MI10 is used in:
Class B (US std.) – Class B/C (EEC std.) fires: Fires whose fuel is flammable or combustible liquid or gas.

Class C (US std.) – Class E (EEC std.) fires: Fires involving potentially energized electrical equipment.

Demsa BC MI10 is not appropriate for extinguishing metal fires.

It may be used in both, hand portable and wheeled extinguishers, vehicles and fixed systems. The use of nitrogen as propellant is advisable. Compressed air, or carbon dioxide may also be used.

3. Toxicity

Demsa BC MI10 does not contain harmful ingredients. Under normal conditions of use, it is environmental friendly and non-toxic to humans and animals. Refer to our **Demsa BC MI10** Safety Data Sheet for further specifications and regulations.

4. Appearance

Demsa BC MI10 is a white, free flowing, hydrophobic powder. Other colors are available upon request.

5. Packing

The most common presentations of **Demsa BC MI10** are:
– 20 kg polyethylene bucket (plastic pail)
– 25 kg polyethylene double bag
– 1000 kg bulk big bag

6. Storage

Demsa BC MI10 is formulated for long term storage; it may last up to five years without loosing its efficiency. However, the powder's integrity depends on the prevalent storage conditions. It is highly recommended to store in temperatures between 4°C to 49°C / 35°F to 120°F (ideal storing temperature is 20°C+- 2°C / 64.4°F to 71.6°F), dry places (60% +- 5% relative humidity), avoid sudden weather conditions changes, do not stack the pallets, handle the packages with care and maintain the product in its original, tight sealed packaging until use.

7. Physical and Chemical Properties

SPECIFICATIONS	VALUES
Particle size analysis, % retained on US Std. sieves:	
#40 (425µm)	0
#100 (150µm)	0-6
#200 (75µm)	8-20
#325 (45µm)	18-30
Water repellency	90 min.
Hygroscopicity method	3 max.
Humidity	0.25 max.
Potassium Bicarbonate concentration %	>=85,50

8. Quality assurance and approvals

Demsa BC MI10 is manufactured under ISO 9001:2008 international standard.
Demsa BC MI10 is produced under UL 711 as recognized component for listed extinguishers and UL 711-P for recharging.
Demsa BC MI10 meets EN 615 – EEC standards.

The information given in this Product Data Sheet is indicative only and does not constitute a guarantee. The manufacture of this product has been carried out under strict control and no risk will be incurred if it is handled and used according to the instructions given. As no control can be exercised over its use, Industrias Químicas Dem S.A. cannot accept responsibility for any damage which may result from its misuse.

Sheet Revision Date: January 5, 2015

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