



PRODUCT MANUAL

FIRE EXTINGUISHER

**Dry Chemical Powder
4, 6 & 9 Kg Capacity (Cartridge
Type)**

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[KANEX FIRE EXTINGUISHER]

Dry Chemical Powder– 4, 6 & 9 Kg Capacity

INTRODUCTION

This manual contains product description; installation, operating, maintenance, inspection and refilling for the KANEX brand Portable Dry Chemical Powder type Fire Extinguisher of capacity 4, 6, 9 Kg by weight of powder. This model is designed to extinguish 'B' and 'C' type fires involving material like Petro Chemical products, Paints, Resins, Pigment, Varnish, Gases in the compressed form like Oxygen, Acetylene, LPG, CNG and Electrical as well as electronic equipments. Also filled with MAP 50%/90% powder.

PRODUCT DESCRIPTION

- The principal advantage of KANEX Portable type DCP (Dry Chemical Powder) type Fire Extinguisher is that the fire extinguisher is handy type and it is easily handles by a single person.
- Body Shell made of Mild steel sheet as per IS: 513, is constructed by welding and the shape of the body is cylindrical. The domes ends of the body are dished outwards.
- The charge, Dry chemical powder of IS 4308 is an extinguishing media that gives blanketing effect on the fire to be put out. The powder is actuated by CO₂ gas cartridge of IS 4947.
- The discharge of the CO₂ gas is by puncturing the frangible disc of cartridge with the piercer needle of the squeeze grip cap. The Cap is made of forged Brass material.
- The discharge connection is lever controlled for obtaining the satisfactory performance
- **OPERATION**
 - ✓ To be operated the Kanex fire extinguisher is held in an upright position
 - ✓ The Discharge Hose is hold firmly in the hand.
 - ✓ The safety sealing device is removed
 - ✓ The locking clip is pulled
 - ✓ The Lever is Squeezed and allowed to build pressure for 6s before opening control valve.
 - ✓ The discharge should be directed at the base of the flames
 - ✓ On fires involving electrical or electronics equipments, discharge should be directed at the source of the flames.

There are two methods of directing the discharge to adopt the better extinguishment



- a) The most commonly used method of agent application on contained flammable liquid fires is to start at the near edge and direct the discharge in a slow, side-to-side sweeping motion, gradually progressing toward the back of the fire.
- b) The other method is called ‘Over head application ‘. The discharge nozzle is directed in a dagger or downward position (at an angle of 45 degrees) toward the center of the burning area.

Generally, for spills fire, the side-to-side sweeping motion could give better results.

The discharge should be applied to the burning surface even after the flames are extinguished to allow added time for cooling and to prevent possible reflash.

PRINCIPALS OF OPERATION

The Dry chemical powder agent extinguishes by blanketing on the Fire surface so that the oxygen levels are kept below the percentage required for combustion. The method of expulsion of dry powder is by means of pressure produced from liquefied CO₂ gas from the gas cartridge.

The discharge time for higher capacity “KANEX” brand Portable type Dry Chemical Powder type Fire Extinguisher for Capacity of 4 kg varies from 14-17 secs, 6 varies from 15 to 20 seconds & for capacity of 9 Kg varies from 23 to 28 seconds. The discharge jet range of the discharge stream is more than 2 meter in all cases. The percentage discharge of the extinguishing media is more than 85 %.

INSTALLATION

Installation of the KANEX Fire Extinguisher requires that the equipment be uncrated, placed in its proper position and secured in place with caster locks.

One set of accessories is packed with fire extinguisher for use in installation either attached with the body or loose in a packet. Please compare your supplied accessories with the following list.

Discharge Nozzle
Discharge Hose Pipe (length 465 mm for 4 & 6 Kg capacity & 560 mm for 9 Kg capacity)
Wall Bracket

To assemble the Fire Extinguisher,

- Connect Hose Pipe to the discharge end of the body placing washer between them
- The other side of hose pipe is connected with Discharge nozzle
- Open the squeeze grip Cap from top dish of the body, Fill rated capacity (6 Kg or 9 Kg) Dry Chemical powder into the body and refit the Cap with cartridge ensuring extreme tightness.
- Keep the Discharge hose end on the clip provided.



INSPECTION, MANINTENANCE AND RECHARGING

The owner or the designated agent or occupant of a property in which fire extinguishers are located shall be responsible for inspection, maintenance and recharging.

INSPECTION:

Fire Extinguisher shall be inspected when initially placed in service and then after at approximately 30 day intervals for routine maintenance. The inspection should be in following points of view.

- Safety Seals not broken or missing
- Visually damage, corrosion, leakage or clogged discharge connection
- Condition of nozzle, Hose Pipe, Cap, wall bracket and fire extinguisher itself
- Weighing of CO₂ cartridge should be carried out at an interval of at least 3 months.
- If the weight is found less than 10 % the stamped filled weight, embossed onto cartridge nut, send the CO₂ cartridge for recharging immediately.

RECHARGING:

It is important to reenergize the Fire Extinguisher as soon as possible to eliminate the potential of recombustion or fire. Each fire extinguisher shall have a tag or label securely attached that indicates the month and year recharging was performed and that identifies the person performing the service.

It is essential to recharge the fire extinguisher as soon as the extinguisher is used for either extinguishing the fire or used for demonstration. The extinguisher must be recharged at a stipulated time duration that is a due of refilling.

Fire Extinguisher Parts [Dry Chemical Powder- Portable (Capacity 4 Kg)]

| INDEX | DESCRIPTION | MOC | QTY. | UNIT |
|-------|-----------------------------|---------------------|------|------|
| 01 | Body Shell | M.S. | 01 | No. |
| 02 | Valve body | Brass | 01 | No. |
| 03 | Neck Ring | M.S. | 01 | No. |
| 04 | Siphon Tube(Inlet) | Aluminium | 01 | No. |
| 05 | Siphon Tube(outlet) | Plastic | 01 | No. |
| 07 | Discharge Hose with Nozzle | EPDM | 01 | No. |
| 08 | CO2 Gas Cartridge (120 GM.) | M.S | 01 | No. |
| 09 | Mounting Bracket | M.S | 01 | No. |
| 10 | SBC/MAP50%/MAP 90% Powder | IS 4308/IS 14609 | 09 | kg. |

[Dry Chemical Powder- Portable (Capacity 6 Kg)]

| INDEX | DESCRIPTION | MOC | QTY. | UNIT |
|--------------|-----------------------------|---------------------|-------------|-------------|
| 01 | Body Shell | M.S. | 01 | No. |
| 02 | Valve body | Brass | 01 | No. |
| 03 | Neck Ring | M.S. | 01 | No. |
| 04 | Siphon Tube(Inlet) | Aluminium | 01 | No. |
| 05 | Siphon Tube(outlet) | Plastic | 01 | No. |
| 07 | Discharge Hose with Nozzle | EPDM | 01 | No. |
| 08 | CO2 Gas Cartridge (120 GM.) | M.S | 01 | No. |
| 09 | Mounting Bracket | M.S | 01 | No. |
| 10 | SBC/MAP50%/MAP 90% Powder | IS 4308/IS 14609 | 09 | kg. |

[Dry Chemical Powder- Portable (Capacity 9 Kg)]

| INDEX | DESCRIPTION | MOC | QTY. | UNIT |
|--------------|-----------------------------|---------------------|-------------|-------------|
| 01 | Body Shell | M.S. | 01 | No. |
| 02 | Valve body | Brass | 01 | No. |
| 03 | Neck Ring | M.S. | 01 | No. |
| 04 | Siphon Tube(Inlet) | Aluminium | 01 | No. |
| 05 | Siphon Tube(outlet) | Plastic | 01 | No. |
| 07 | Discharge Hose with Nozzle | EPDM | 01 | No. |
| 08 | CO2 Gas Cartridge (200 GM.) | M.S | 01 | No. |
| 09 | Mounting Bracket | M.S | 01 | No. |
| 10 | SBC/MAP50%/MAP 90% Powder | IS 4308/IS 14609 | 09 | kg. |