LARGE USERS
BUSINESS

Adhesive & Protective
Coating Solutions for

HVAC Industry

Product Application Index

Substrate / Product	HVAC Ducting								
	Fevicol AC Duct King Eco Fresh	Fevicol AC Duct King	Fevicol AC Duct King Optima	Fevicol SR 505	Fevicol SR 998	Fevicol AC Prefab	Fevicol 1K PUR	Fevicol AC Duct King Lag Coating AF 5590	Fevicol Weather Protect Coat
Nitrile Rubber	✓	✓	✓	✓	✓			✓	✓
XLPE		✓		✓	✓			✓	✓
Glass Wool	✓	✓		✓	✓		✓	✓	✓
Rock Wool	✓	✓		✓	✓		✓	✓	✓
EPS/XPS							✓	✓	✓
PUF		✓		✓	✓		✓	✓	✓
EPDM		✓	✓	✓	✓			✓	✓
PIR						✓		✓	✓
Phenolic Foam						✓		✓	✓

Substrate / Product	Chilled Water Piping								
	Fevicol AC Duct King Eco Fresh	Fevicol AC Duct King	Fevicol AC Duct King Optima	Fevicol SR 505	Fevicol SR 998	Fevicol AC Prefab	Fevicol 1K PUR	Fevicol AC Duct King Lag Coating AF 5590	Fevicol Weather Protect Coat
Nitrile Rubber		✓	✓	✓	✓			✓	✓
XLPE		✓		✓	✓			✓	✓
Glass Wool	✓	✓		✓	✓		✓	✓	✓
Rock Wool	✓	✓		✓	✓		✓	✓	✓
EPS/XPS							✓	✓	✓
PUF		✓		✓	✓		✓	✓	✓
EPDM		✓	✓	✓	✓			✓	✓
PIR						✓		✓	✓
Phenolic Foam						✓		✓	✓

Note

- Substrates given for Application are indicative and should be confirmed from the respective supplier before installing
- Please refer the respective TDS for detailed Adhesive / Coating application

Substrate / Product	Under Deck Insulation								
	Fevicol AC Duct King Eco Fresh	Fevicol AC Duct King	Fevicol AC Duct King Optima	Fevicol SR 505	Fevicol SR 998	Fevicol AC Prefab	Fevicol 1K PUR	Fevicol AC Duct King Lag Coating AF 5590	Fevicol Weather Protect Coat
Nitrile Rubber	✓	✓	✓	✓	✓		✓	✓	✓
XLPE		✓		✓	✓			✓	✓
Glass Wool	✓	✓		✓	✓		✓	✓	✓
Rock Wool	✓	✓		✓	✓		✓	✓	✓
EPS/XPS							✓	✓	✓
PUF		✓		✓	✓		✓	✓	✓
EPDM		✓	✓	✓	✓		✓	✓	✓
PIR					✓	✓	✓	✓	✓
Phenolic Foam					✓	✓	✓	✓	✓

Substrate / Product	Wall Panelling / Acoustic Lining								
	Fevicol AC Duct King Eco Fresh	Fevicol AC Duct King	Fevicol AC Duct King Optima	Fevicol SR 505	Fevicol SR 998	Fevicol AC Prefab	Fevicol 1K PUR	Fevicol AC Duct King Lag Coating AF 5590	Fevicol Weather Protect Coat
Nitrile Rubber		✓	✓	✓	✓		✓	N.A.	N.A.
XLPE		✓		✓	✓			N.A.	N.A.
Glass Wool	✓	✓		✓	✓		✓	N.A.	N.A.
Rock Wool	✓	✓		✓	✓		✓	N.A.	N.A.
EPS/XPS							✓	N.A.	N.A.
PUF		✓		✓	✓		✓	N.A.	N.A.
EPDM		✓	✓	✓	✓		✓	N.A.	N.A.
PIR						✓	✓	N.A.	N.A.
Phenolic Foam						✓	✓	N.A.	N.A.

* For under deck and Wall Paneling / Acoustic Lining. Fastners are recommended with adhesive.

Other Products

- USPRO Construction Foam
- Dr. Fixit Silicone Sealant GPS

Technical Data Sheet

FEVICOL AC DUCT KING ECO FRESH

Water based non-flammable ASTM E 84 conforming adhesive

Description

FEVICOL AC DUCT KING ECO FRESH is water based environment friendly, synthetic resin adhesive, specially developed for HVAC ducting, chilled water piping and underdeck insulation applications in HVAC & R Industry. It is extremely ideal for Green Certified & Safety Priority projects because it has low VOC, low Flame Retardancy and does not emit smoke.

Recommended Application Area

- HVAC ducting insulated with Nitrile Rubber, Glass Wool, Rock Wool and Chilled Water Piping with Glass Wool and Rock Wool
- Under deck Insulation with Nitrile Rubber, Glass Wool, Rock Wool (to be applied along with mechanical fasteners)
- Wall panelling / Acoustic with Glass Wool and Rock Wool

Unique Features and Benefits

- Conforms to ASTM E 84 test for Low Flame Spread and Low smoke develop Index
- Certified as a Class A product by Exova Warringtonfire
- Fire retardant water based formulation
- Very low VOC (< 20 gms / litre)
- Higher coverage & hence low adhesive cost per unit area ensures better cost benefit compared to rubber base
- Mild smell and low toxicity - Excellent for low ventilated areas and safe for occupants / applicators
- Very strong bonding ensuring zero reworking costs
- Excellent tack - Longer tack retention/open time

Standards Conformation

- Surface Burning Characteristics - ASTM E 84
- Class A/1 Product Exova Warringtonfire
- IGBC/LEED VOC

Type of Building / Application

- Hospitals & Hospitality
- Pharmaceutical & beverage industries
- Green buildings
- Research centre and laboratory
- High Density Areas such as malls, airports, auditoriums etc.

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture
- Stir the adhesive well before use to have a homogeneous material prior to application
- Apply the adhesive by spreader only in thin uniform layer on both the substrates. Do not use brush.
- For faster tack development & bonding, thin layer of adhesive is mandatory
- Allow to develop tack (best judged by change in colour from greenish to colourless)
- Once the tack is developed, bonding of the substrates can be done even after 2 hrs unlike rubber based adhesive
- Press it uniformly by hand pressure taking care that no air pockets are formed
- Cure for 24 hrs at ambient temperature
- When Glass Wool/Rock Wool substrates are bonded, adhesive should be applied only on Duct/Pipe/ Concrete substrates and not on insulation
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use
- Do not use the adhesive on undulated surface
- Do not dilute. Dilution distorts the product performance
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

- **Appearance : Light green opaque paste**
- **Viscosity at 30° ±1°C : 40-80 poise**
- **Temperature resistance : -20°C to 60°C**
- **VOC : < 20 gms / litre**
- **Coverage by spreader : 9m² / kg (bonded area)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

12 months from the date of manufacture & when stored in a dry and cool place in the original unopened container. (Recommended Storage temperature: 20 °C to 30°C)

Packing

20 kg plastic drum

Rev. No. 0.07 / Feb 2018

Technical Data Sheet

FEVICOL AC DUCT KING

Low coverage cost with across multiple applications

Description

FEVICOL AC DUCT KING is a synthetic rubber based adhesive specially developed to bond various insulation materials with HVAC ducts, Chilled Water Pipe lines, and Underdeck in various industrial & residential projects. The product can be conveniently applied in low ventilated sites at remote places, as the smell is very mild.

Recommended Application Area

- HVAC Ducting - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to Duct surface
- Chilled Water piping - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to MS pipe lines
- Acoustic Insulation - To Bond Nitrile Rubber to Concrete walls, Vertical surfaces & Duct lining
- Wall panelling - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool to smooth Concrete wall surface
- Under deck Insulation - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to smooth Concrete wall surface (Mechanical fasteners are recommended for under deck insulation)

Unique Features and Benefits

- Industry first adhesive exclusively for ducting, chilled water piping recommended for other multiple applications
- Higher coverage & hence low coverage cost
- Mild smell ensures no harm to the applicators
- Strong bond durability (Aging resistance) with all types of insulation material
- Free From Carcinogenic compounds
- High spread ability & ease of application

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture
- Stir the adhesive well before use to have a homogeneous material prior to application
- Apply Fevicol AC Duct King on both the substrates uniformly by spreader / brush. Use of spreader for flat non-porous insulation surface can help to improve coverage
- When Glass Wool/Rock Wool substrates are bonded, adhesive should be applied only on Duct/Pipe/ Concrete substrates and not on insulation
- Once the adhesive becomes touch dry (when tack is developed), press both the substrates together ensuring uniform contact so that air pockets are not formed
- Cure for 24 hrs at ambient temperature
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use.
- Contains flammable solvents, so precautions required in storing.
- Adhesive or vapour from the adhesive should not come in contact with fire spots, naked flames or welding area on shop floor/work site.
- Do not use the adhesive on undulated surface
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request

Typical Data

- **Appearance** : **Light Yellow Liquid**
- **Viscosity at 30° ±1°C** : **8-12 poise**
- **Temperature Resistance** : **-20°C to 85°C**
- **Specific Gravity@30° ± 1°C** : **0.83 to 0.85**
- **Coverage by spreader** : **8 m² / litre (for bonded area)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

18 months from the date of manufacture & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

30 litre drum

Rev. No. 0.07 / Feb 2018

FEVICOL AC DUCT KING OPTIMA

Low VOC synthetic rubber based adhesive to bond nitrile rubber in HVAC applications

Description

FEVICOL AC DUCT KING OPTIMA is a synthetic rubber based, low VOC product specially developed for various applications in HVAC industry. It is an excellent adhesive to bond Nitrile Rubber for insulating HVAC Ducts, Chilled Water Pipe lines and Underdeck for various industrial & residential projects.

Recommended Application Area

- HVAC Ducting - To bond Nitrile Rubber, EPDM (20 mm thickness max) to duct surface
- Chilled Water piping - To bond Nitrile Rubber, EPDM (15 mm thickness max) to MS pipe lines
- Acoustic insulation - To bond Nitrile Rubber, EPDM (20 mm thickness max) to concrete walls, vertical surfaces & duct lining
- Under deck insulation - To bond Nitrile Rubber, EPDM (20 mm thickness max) to smooth concrete wall surface (mechanical fasteners are recommended for under deck insulation)

Unique Features and Benefits

- Low VOC product improves the IAQ
- Mild smell does not cause any irritation to the occupants / applicators
- Suitable for low ventilated areas
- Very strong bonding ensuring zero reworking costs
- Free from Carcinogenic compounds

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture etc.
- Stir the adhesive well before use to have a homogeneous material prior to application
- Apply Fevicol AC Duct King Optima on both the substrates uniformly by spreader / brush. Use of spreader for flat non-porous insulation surface can help to improve coverage.
- Once the adhesive becomes touch dry (when tack is developed), press both the substrates together ensuring uniform contact so that air pockets are not formed
- Cure for 24 hrs at ambient temperature
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use.
- Contains flammable solvents, so precautions required in storing.
- Adhesive or vapour from the adhesive should not come in contact with fire spots, naked flames or welding area on shop floor/work site.
- Do not use the adhesive on undulated surface
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

- **Appearance : Very Light Yellow Liquid**
- **Viscosity at 30° ±1°C : 10-15 poise**
- **Temperature Resistance : -20°C to 85°C**
- **Specific Gravity@30° ± 1°C : 0.865 – 0.895**
- **VOC : 320 (±2%)gms / litre**
- **Coverage by spreader : 7 m² / litre (For bonded area)**

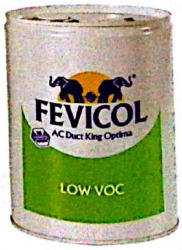
(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

18 months from the date of manufacture & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

30 litre drum



Rev. No. 0.07 / Feb 2018

Technical Data Sheet

FEVICOL SR 505

Popular Multipurpose mild smell synthetic rubber based adhesive

Description

FEVICOL SR 505 is a synthetic rubber based adhesive developed to bond various insulation materials with HVAC Ducts, Chilled Water Pipe lines, and Underdeck in various industrial & residential projects. The product can be conveniently applied in low ventilated sites at remote places, as the smell is very mild.

Recommended Application Area

- HVAC Ducting - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to Duct surface
- Chilled Water piping - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to MS pipe lines
- Acoustic Insulation - To Bond Nitrile Rubber to Concrete walls, Vertical surfaces & Duct lining
- Wall panelling - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool to smooth Concrete wall surface
- Under deck Insulation - To bond Nitrile Rubber/EPDM/XLPE(20 mm thickness max), Glass Wool/Rock Wool, PUF to smooth Concrete wall surface (Mechanical fasteners are recommended for under deck insulation)

Unique Features and Benefits

- Excellent adhesion to multiple substrates
- Very Mild smell ensures the applicators and users will not be harmed
- Strong Bond durability (Aging resistance)
- Free From Carcinogenic compounds

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture
- Stir the adhesive well before use to have a homogeneous material prior to application
- Apply Fevicol SR 505 on both the substrates uniformly by spreader / brush. Use of spreader for flat non-porous insulation surface can help to improve coverage.
- When Glass Wool/Rock Wool substrates are bonded, adhesive should be applied only on Duct/Pipe/ Concrete substrates and not on insulation.
- Once the adhesive becomes touch dry (When tack is developed), press both the substrates together ensuring uniform contact so that air pockets are not formed
- Cure for 24 hrs at ambient temperature
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use.
- Contains flammable solvents, so precautions required in storing.
- Adhesive or vapour from the adhesive should not come in contact with fire spots, naked flames or welding area on shop floor/work site.
- Do not use the adhesive on undulated surface
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request

Typical Data

- **Appearance : Light yellow liquid**
- **Viscosity at 30° ±1°C : 12-16 poise**
- **Temperature Resistance : -20°C to 80°C**
- **Specific Gravity@30° ± 1°C : 0.82 to 0.86**
- **Coverage by spreader : 6-6.5 m² / litre (for bonded area)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

18 months from the date of manufacture & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

25 litre drum, 5 litre tin.

Rev. No. 0.07 / Feb 2018

FEVICOL SR 998

Superior bond with multiple substrates

Description

FEVICOL SR 998 is a high strength synthetic rubber adhesive specially developed to bond Nitrile Rubber or XLPE to Galvanized Iron, Aluminium duct surface, Mild Steel for insulating HVAC ducts, Chilled Water Pipe Lines and Underdeck in various industrial & residential projects.

Recommended Application Area

- HVAC Ducting - To bond Nitrile Rubber, EPDM, XLPE, Glass Wool /Rock Wool, PUF to Duct surface
- Chilled Water piping - To bond Nitrile Rubber, EPDM, XLPE and Glass Wool/Rock Wool, PUF to MS pipe lines
- Acoustic Insulation - To Bond Nitrile Rubber to Concrete walls, Wood / Metal surfaces & Duct lining
- Wall panelling for cold storages - To bond Nitrile Rubber, EPDM, XLPE, Glass Wool/Rock Wool to smooth Concrete wall surface/ GI / MS
- Under deck Insulation - To bond Nitrile Rubber, EPDM, XLPE, Glass Wool/Rock Wool, PUF, PIR/Phenolic Foam to smooth Concrete wall surface (Mechanical fasteners are recommended for under deck insulation)
- Brine Chilled Water Piping - To bond Nitrile Rubber, XLPE to MS pipe lines. Service temperature of water up to -20°C
- Thermal Storage System Tanks - To bond Nitrile Rubber, EPDM, XLPE to MS Tanks

Unique Features & Benefits

- Outstanding performance for curved surfaces
- Excellent spring back, water and heat resistance
- Superior performance at sub-zero temperatures
- Ideal for refrigeration applications
- Mild smell and hence can be used in low ventilated sites or remote places.
- Rapid and Strong strength development
- Excellent bond durability (aging resistance)
- Free from Carcinogenic compounds

Type of Building / Application

- Hospital and hospitality
- Pharmaceuticals and beverages
- Research Centre and Laboratory
- Recording studios
- Cold storages
- High density areas such malls, airports, auditoriums etc.

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture etc.
- Stir the adhesive well before use to have homogeneous material prior to application
- Apply Fevicol SR 998 on both the substrates uniformly by spreader / brush. Use of spreader for flat non-porous insulation surface can help to improve coverage.
- When Glass Wool/Rock Wool substrates are bonded, adhesive should be applied only on Duct/Pipe/ Concrete substrates and not on insulation.
- Once the adhesive becomes touch dry(when tack is developed), press both the substrates together ensuring uniform contact so that air pockets are not formed
- Cure for 24 hrs at ambient temperature
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use.
- Contains flammable solvents, so precautions required in storing.
- Adhesive or vapour from the adhesive should not come in contact with fire spots, naked flames or welding area on shop floor/work site.
- Do not use the adhesive on undulated surface
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

- **Appearance : Dark brown liquid**
- **Viscosity at 30° ±1°C : 20-25 poise**
- **Temperature Resistance : -20°C to 96°C**
- **Specific Gravity@30° ± 1°C : 0.84 to 0.88**
- **Coverage by Spreader : 5.0 m2 / litre (For bonded area)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

18 months from the date of manufacturing & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

25 litre drum, 5 litre tin.

Rev. No. 0.07 / Feb 2018

FEVICOL AC PREFAB

Quick and High Grab Adhesive specially developed for Angular Bonding.

Description

FEVICOL AC PREFAB is a new generation Synthetic Rubber based adhesive, specially developed for bonding Pre Insulated Panels made of PIR, PU foam, Phenolic foam etc. The Adhesive is fast drying adhesive & develops quick grab which is preferred for faster rate of fabrication. It can be easily applied at all ambient conditions by spreader/brush. It is an ideal adhesive for quick assembly of pre-fabricated panels for onsite construction of HVAC ducts.

Recommended Areas of Application

HVAC Ducting - To bond angular PIR, PU Foam or Phenolic Foam surfaces.

Unique Features & Benefits

- Strong angular bonding with PIR / PU / Phenolic Foam application.
- Faster drying at ambient temperature
- Quick grab development ensures higher productivity
- Excellent spreadability
- Free from Carcinogenic compounds

Recommended Method of Application

- Ensure the substrates to be bonded are free from dust/rust/oil/moisture etc.
- Stir the adhesive well before use to have homogenous material prior to application
- Apply the adhesive by brush in thin uniform layer on both the surfaces of PIR, PU/ Phenolic Foam surfaces
- Allow to develop the tack with an open time of 3-4 minutes.
- If the surface is porous, apply a second coat & allow to dry second coat for 3-4 minutes
- When tack is developed, press firmly & uniformly by hand taking care that no air pockets are formed
- Allow to cure the duct assembly for 24 hrs at ambient temperature
- For underdeck application, apply minimum two coats of adhesive on both the surfaces (if required, extra coats can be done depending on substrate porosity)

Precautions & Limitations

- Keep the container closed when not in use. Stir the adhesive well before use.
- Contains flammable solvents, so precautions required in storing.
- Adhesive or vapour from the adhesive should not come in contact with fire spots, naked flames or welding area on shop floor/work site.
- Do not use the adhesive on undulated surface
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

- **Appearance : Light brown medium viscous liquid**
- **Viscosity at 30° ± 1°C : 17-22 poise**
- **Temperature Resistance : -20°C to 85°C**
- **Specific Gravity@30° ± 1°C : 0.80 to 0.84**
- **Coverage by Spreader : 4.5 m² / Litre (for bonded area)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate)

Shelf Life & Storage

18 months from the date of manufacture & when stored in a dry and cool place in the original unopened Container (Recommended Storage temperature: 20 °C to 30°C)

Packing

30 litre drum

Rev. No. 0.07 / Feb 2018

Technical Data Sheet

FEVICOL 1K PUR

No shut down, single component moisture curing Adhesive

Description

FEVICOL 1K PUR is a single component, moisture curing adhesive. It cures by reacting with atmospheric moisture to exhibit tough elastic bond. It is ideally developed to bond pre-fabricated PIR or Phenolic Sheet, Nitrile rubber, Expanded polystyrene, PUF to Concrete/ Mat Galvanized Iron or MS for Chilled water piping, Hot water piping, Under deck or Wall Panelling application with the help of screwing or clamping. Fevicol 1K PUR is Green product with low VOC, extremely suitable for Green Certified projects.

Areas of Application

- HVAC Ducting - To bond Glass Wool/Rock Wool, Expanded Polystyrene, PUF to duct surface (Mechanical fastening required)
- Chilled Water Piping- To bond Expanded Polystyrene, PUF, Glass Wool/Rock Wool to MS (Bonding can be done even in running condition of Chilled water Pipes. Mechanical Fastening is required)
- Hot Water Piping- To bond Expanded Polystyrene to MS Pipe. (Hot water up to 80 °C. Mechanical Fastening is required)
- Under Deck & Wall Panelling– To bond Nitrile Rubber, EPDM, Expanded PolyStyrene, Glass Wool/Rock Wool, Pre-fabricated PIR or Phenolic duct, PUF to Concrete / GI/MS panel (Mechanical Fastening is required)
- Overdeck Panelling – To bond Extruded Poly Styrene and PUF to Concrete (Mechanical Fastening is required)
- Prefabricated Ducts - To Bond Metallic/PVC Brackets at the edges & corners of PIR or Phenolic ducts

Unique Features & Benefits

- Single component moisture curing adhesive and hence excellent for insulation changeover even in running conditions especially in chilled water piping system
- Can be applied even when the surface is moist
- No need of shutdown for Chilled water piping system
- Ease of application as compared to Bitumen
- Excellent gap filling property
- Low VOC / Green product
- Good adhesion to multiple substrates

Recommended Method of Application

- Apply adhesive on Insulation Substrate only by spreader / brush uniformly, apply thicker coat of adhesive if bonding with concrete.
- Then Wet the Concrete / GI / MS surface by spraying little amount of water.
- Remove the excess water condensed if any, on the rework area surface before bonding.
- Then Press the Insulation Substrate on Wall / Chilled Water Pipe / Duct within 5 mins after adhesive application (Once appearance of adhesive changes from honey coloured liquid to pale yellow foam) and hold the bonded area by self-adhesive tape/Wire/screw/ Clamp for at least 2 hours.
- For Metallic / PVC Bracket to PIR duct bonding, apply adhesive on Metallic brackets, edges & corners of Prefabricated Duct & press firmly with good contact pressure.
- A strong bond is achieved after 2-3 hrs at ambient condition & optimum strength is achieved after 24 hrs.
- When Glass Wool/Rock Wool substrates are bonded, adhesive should be applied only on Duct/Pipe/ Concrete substrates and not on insulation.

Precautions & Limitations

- The container to be closed tightly after use as product is moisture curable.
- The entire content in the drum/bottle may become solid if exposed to atmospheric air for longer period of time.
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

- **Appearance** : **Pale yellow viscous clear liquid**
- **Viscosity at 30°C** : **40-80 poise**
- **VOC content** : **10 gms/ Lit max**
- **Open Time** : **5 to 15 minutes**
- **Final Bond Strength** : **After 24 hours**
- **Coverage** : **5-6 m² /Kg**

(Under identical lab test conditions at ambient, on smooth non-porous substrate on single side application)

Shelf Life & Storage

Shelf life is 9 months from the date of manufacturing & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

500 ml plastic bottle

Rev. No. 0.07 / Feb 2018

FEVICOL AC DUCT KING LAG COATING AF 5590

UL classified antifungal vapour barrier & fire retardant coating ideal for protecting Insulation against mechanical damage

Description

FEVICOL AC DUCT KING LAG COATING AF 5590 is an UL classified, antifungal, vapour barrier & fire retardant coating which protects insulation against fire & flame, mechanical damage, fungal growth & condensation. It is a Green and Safe Fire resistant coating with low VOC.

Recommended Area of Application

- Coating is strongly recommended for all Insulated HVAC Ducts, Chilled Water piping and VRV / VRF piping in internal areas with low relative humidity

Reasons for Recommendation

- Mechanical Protection – Protects Insulation material from mechanical damage
- Fire retardant – Prevents spread of flames and smoke generation
- Anti-Fungal – Prevents fungal growth and helps maintain IAQ
- Vapour Barrier – Prevents surface condensation and Heat loss
- Reduced OPEX – Reduces energy losses, maintenance & reworking cost and increases life of the system
- Faster Completion – Reduces labour time and help in faster completion since brush applied

Standards Conformation

- UL classified for Surface Burning Characteristics (UL 723)
- Flammability and Smoke Developed Index – ASTM E84
- Fungal Resistance - ASTM D 5590
- Flammability Resistance - ASTM D 4804
- Wet Flammability Resistance - ASTM D 3278
- Water Vapour Permeability – ASTM E 96
- IGBC/LEED VOC

Unique Features and Benefits

- Superior Protection against mechanical & abrasion damage.
- Better Performance compared to laminated protective covering
- Prevents formation of surface cracks on Insulated Surfaces due to aging
- Prevents spread of flame & smoke
- Multiple Applications for internal HVAC Insulated Ducts, VRV/VRF Pipes and Chilled Water Pipes
- Prevents Fungal growth
- Prevents the probable ingress of VOC present in low engineered adhesive through the Supply/Return Air because of the tight vapour barrier coating
- Available in 15 shades

Type of Building / Application

- Health Care & hospitality
- Pharmaceutical & Process Industries
- Food & Beverage Industries
- Green Buildings
- IT / ITES, Commercial & Public Building & Spaces
- VRV / VRF piping system based Air-conditioned buildings

Recommended Method of Application

- Clean the substrates to be coated, so that they are free from dust/rust/oil/ moisture
- Stir Fevicol AC Duct King Lag Coating AF 5590 well before use to have a homogeneous material prior to application
- Apply Fevicol AC Duct King Lag Coating AF 5590 on insulated surface uniformly by brush
- Immediately wrap Glass or Canvas cloth tightly with over lapping so that no gaps are left and no air pockets are formed
- Immediately apply additional coating on wrapped cloth to achieve smooth, neat coated surface
- Allow to cure for minimum 24 hrs at ambient temperature

Precautions & Limitations

- Do not dilute. Dilution distorts the product performance
- Keep the containers closed when not in use
- Please pre-consult before application in high humidity conditions
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Typical Data

Appearance	:	**Milky White Thixotropic Opaque paste**
Viscosity at 30° ±1°C	:	**500 - 950 poise**
Wet Flammability (D 3278)	:	**No flash to boiling**
Temperature Resistance	:	**-18°C to 80°C**
Specific Gravity@30° ±1°C	:	**1.19 to 1.27**
% VOC (gms/Lit)	:	**< 1 gms / litre**
Coverage by Brush	:	**1.5-2 m² / litre / coat (with recommended quality of Glass Cloth)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate with single side application)

Shelf Life & Storage

24 months from the date of manufacture & when stored in a dry and cool place in the original unopened container (Recommended Storage temperature: 20 °C to 30°C)

Packing

25 Kg and 5 Kg plastic pail

NOTE : (Due to continuous product improvements, the data mentioned in this TDS herein, supersedes all earlier versions and, subject to change without prior intimation). The Product information & application details given by the company & its agents has been provided in good faith and meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure on the suitability of products meeting their requirement prior to full scale usage of our products. Since the correct identification of the problems, quality of other materials used and on-site workmanship are factors beyond our control, there are no expresses or implied guarantee/warranty as to the results obtained. The company does not assume any liability or any consequential damage for unsatisfactory results, arising from the use of our products.

Rev. No. 0.07 / Feb 2018

FEVICOL WEATHER PROTEKT COAT

Monolithic joint free coat for protecting insulation in exposed conditions

Description

Fevicol Weather Protekt Coat is water based fire retardant, flexible, vapour barrier, high solid coat which imparts tough mechanical protection and durable seal against water, moisture & weathering. It is ideal for protecting all types of Insulation material used in Hot and Cold Insulation used in any type of Industrial / HVAC applications.

It is specially developed to enhance the insulation life since it protects the insulation from weathering for longer period of time and imparts special properties like erosion protection, water vapour barrier, protection from fungal and algal attack. It can be used in exposed exterior and high humidity environments

Recommended Area of Application

- Strongly recommended for all HVAC Ducts, Chilled Water piping and VRV / VRF piping insulated with any type of Insulation in internal areas and external areas including high relative humidity environment.
- Light industrial usage on insulated surfaces

Reasons for Recommendation

- Excellent Mechanical Protection – Protects insulation material against mechanical damage
- Weathering Resistance- Longer life of Insulation even in exposed condition
- Excellent Longevity – The coated surface does not caulk, crack and chip even in highly exposed conditions.
- Water Vapour Barrier – Prevents water ingress below the insulation and preventing corrosion under Insulation.
- Anti-Fungal and Anti Algal – Prevents the fungal growth and Algal attack on coated surface
- Fire Retardant – Prevents spread of Flames and Smoke generation
- Faster Completion – Reduces the labour time and help in faster completion due to brushable system of application
- Reduced CAPEX – Reduced CAPEX as compared to the Sand-Cement plaster / Aluminum Cladded system
- Reduced OPEX – Reduces Energy Losses, maintenance & reworking cost and increases Overall System Life

Standards Conformation

- Fungal Resistance -ASTM D 3273
- Weathering Resistance - ASTM D 6695
- Surface Flammability - ASTM E 84
- Resistance to fire at liquid stage- ASTM D 3278
- Content of VOC- EPA 24
- Resistance to water vapour permeance -ASTM E 96
- Algal Resistance -ASTM D 5589
- Rain Water Resistance-As per ASTM D 6904
- Antimicrobial Efficacy -ASTM E 2315
- Fungal Resistance -ASTM G21

Type of Building / Application

- Industrial Aapplication
- Oil and Gas/Chemical Industries
- Pharmaceutical & Process Industries
- Food & Beverage industries
- Health Care & Hospitality
- Green Buildings
- IT / ITES, Commercial & Public Building & Spaces
- VRV / VRF piping system based Air-conditioned buildings

Recommended Method of Application

- Clean the substrates to be coated, so that they are free from dust/rust/oil/moisture
- **For Open Cell Fibrous Insulation (Glass Wool/Rock Wool)**
  a. Tightly wrap 10 mil Glass Cloth of recommended quality over the Insulation & overlap the joint at least 5cm. Remove wrinkles. For Pipe wrapping, usage of glass cloth tape is recommended
  b. Apply the first coat of Weather Protekt by brush and allow it to cure at ambient for at least 4-6 Hrs.
  c. Post Curing apply the second coat of Weather Protekt for smooth and uniform finish
  d. For critical applications, apply 3rd coat after 4-6 Hrs of curing of 2nd coat
  e. Allow to cure the multi coat system for minimum 24 Hrs at ambient temperature
- **For Closed Cell Insulation(Nitrile/EPDM/XLPE)**
  a) Apply first coat of Weather Protekt over insulation by brush uniformly
  b) Wrap tightly 10 mil Glass Cloth of recommended quality over the Insulation & overlap the joint at least 5cm
  c) Remove wrinkles, air pocket. For Pipe wrapping, usage of glass cloth tape is recommended
  d) Immediately apply second coat of Weather Protekt for smooth and uniform finish
  e) For critical applications, apply 3rd coat after 4-6 Hrs of curing of 2nd coat
  f) Allow to cure the multi coat system for minimum 24 Hrs at ambient temperature.
- Total recommended DFT of coating is 700 to 1000µ

Precautions & Limitations

- Do not dilute. Dilution distorts the product performance
- Keep the containers closed when not in use
- Allow to dry coated substrate for 24 Hrs before further work, avoid application during rain and very high humidity condition to avoid wash off/slow drying issue.

MSDS is available on request.

Typical Data

- **Appearance : Milky White Thixotropic Opaque paste**
- **Viscosity at 30° ±1°C : 500 - 900 poise**
- **Wet Flammability (D 3278) : No flash to boiling**
- **Temp. Resistance : -18°C to 100°C**
- **Specific Gravity@30° ±1°C : 1.1 to 1.3**
- **% VOC (gms/Lit) : < 40 gms / litre**
- **Coverage by Brush : 1.5-2 m² / litre / coat (with recommended quality of Glass Cloth)**

(Under identical lab test conditions at ambient, on smooth nonporous substrate with single side application)

Shelf Life & Storage

24 months from the date of manufacture & when stored in a dry and cool place in the original unopened container
(Recommended Storage temperature: 20-30°C)

Packing

25 Kg and 5 Kg plastic pail

Rev. No. 0.07 / Feb 2018

DR. FIXIT SILICONE SEALANT GPS

Multipurpose moisture curing, solvent free, acetoxy cure silicone sealant

Description

Dr. Fixit Silicone Sealant GPS is an acetoxy cure, high viscous and single component silicone sealant. When properly cured, it becomes a permanently elastic compound. It has excellent adhesion to metal and concrete. It is ideal for low temperature in refrigeration sites.

Recommended Areas of Application

- Ideal for sealing gaps in HVAC ducting between flanges and joints
- Sealing of aluminium/glass window frame joints, fixing glass into aluminium frames in lieu of rubber beading.

Unique Features & Benefits

- Non Flammable in uncured conditions
- No mixing is required, directly applicable through cartridge
- No solvent hence eco-friendly
- Completely non-sagging in nature
- Tough & flexible after curing so performs well during expansion & contraction
- Cures by moisture absorption from air at ambient temperature
- Service temperature – From – 60 to + 180°C

Recommended Method of Application

- The surface should be made clean, dry and degreased before applying Dr. Fixit Silicone Sealant GPS
- Fix the masking tape on both sides of joint leaving exact gap for filling. This will make joint look good and uniform
- It is supplied in ready to use plastic cartridges. Cut nozzle at an angle to desired bead size. Cut the tip of cartridge and fix the nozzle. Load the cartridge into the sealant gun
- Fill the joint with Dr. Fixit Silicone Sealant GPS. Immediately after filling the joint, the sealant should be tooled either with pallet knife or similar tool of required size. Tooling is essential to remove air bubbles if any and to fill up all voids by the compacting action. This results in proper adhesion to the sides of the joint. It also gives better aesthetic surface
- Remove masking tape once the sealant is in touch dry condition
- After sealing the joint, tools and equipment should be cleaned immediately with kerosene or any other cleaning solvents
- Allow sealant to cure for 7 days minimum at above 50% RH

Precautions & Limitations

- Avoid usage in food industries for filling gaps
- Do not use where over coating of painting may be done

Typical Data

- **Appearance** : **Clear Homogeneous, viscous & soft consistent paste. Also available in Black and other colours on request**
- **Skinning time** : **10 – 15 minutes**
- **Tack Free time** : **3 Hrs**
- **Curing time** : **Approx. 24 hrs for 2 mm thickness at 30 °C & 24 hrs for each further mm**
- **Service temperature** : **From – 60 °C to + 180 °C**
- **Hardness, Shore A** : **12 -18**
- **Coverage by spreader** : **One 280 ml cartridge will cover 5 mm width x 5 mm depth joint = 11.2 linear metre / 10 mm width x 10 mm depth joint = 2.8 linear metre**

(Under identical lab test conditions at ambient, on smooth nonporous substrate with single side application)

Shelf Life & Storage

Shelf life is 12 months from the date of manufacturing if stored in original and unopened packaging in a cool dry place away from direct sunlight

Packing

280 ml plastic cartridge with separate nozzle

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USPRO Construction FOAM

Single component self-expanding polyurethane foam for filling gaps between HVAC duct / chilled water/VRV/ VRF pipes and doors/windows/walls.

Description

USPRO Construction Foam is single component self-expanding polyurethane foam used primarily to seal, fill, fix & adhere to the gap between HVAC Duct/ Chilled water/VRV/VRF Pipes and door/ window/wall. Foam is water proof, CFC free & environment protective.

Recommended Application Area

- HVAC Ducts: To seal, fill, fix and adhere the gap between Duct & Structure
- Chilled Water Pipe: To seal, fill, fix and adhere the gap between Chilled Water Pipes & Structure
- VRV/VRF Pipe: To seal, fill, fix and adhere the gap between VRV/VRF Pipes & Structure
- To repair hole, gap, wall brick, earth brick & to seal, fill, fix and adhere the gap between door, window and wall
- Sealing of mechanical and electrical penetrations through compartment walls and floors.
- Packing and transportation: Pack valuable and fragile goods easily, time saving, quick, shock and press resistance

Unique Features and Benefits

- Large Gap/Cavity filler with moisture curing technology
- Can seal gaps even on running chilled water & VRV/VRF pipes
- Excellent sealing on most of construction materials without primer
- Hard foam is developed post curing which is structurally strong
- Expansion of the foam ensures the gaps are properly sealed
- Can be used for electrical wirings and cable gap filling and sealing in structure
- Cures itself using moisture in the air/substrate
- Cured foam can be painted/coated to suit the aesthetics

Recommended Method of Application

- Ensure all surfaces are free from oil, greases, loose particles and dust
- Shake the canister thoroughly 20 times approximately before use
- Attach the plastic straw using the screw mechanism on canister firmly and aim straw at gap then spray
- Fill vertical joints from the bottom up
- While filling the gaps in ceiling, uncured foam may drop because of gravity. Support extruded foam properly after filling until foam is cured and adhered to the gap
- Allow foam to be tack free for approx. 10 minutes. Foam can be cut after 60 minutes of application
- Use a knife to smooth the cured foam and treat surface with cement, paint or silicone sealant if required

Precautions & Limitations

- The canister must be capped immediately after use to avoid exposure to atmosphere
- Remove wet stains with acetone. Dry stains can only be removed mechanically
- Cured foam may turn yellow by direct exposure to UV rays
- Use of PPE's (protective hand gloves, mask & goggles) is strongly recommended

MSDS is available on request.

Technical Data Sheet

Typical Data

- **Density** : 15-30 kg/m³
- **Tack free time** : 9-13min
- **Cutting time** : 60min approx
- **Closed cell** : 60-70%
- **Temperature resistance** : -40°C to ±90°C
- **Yield per 750 ml** : 45 litres

(Under identical lab test conditions at ambient sprayed in free area)

Shelf Life & Storage

- Shelf life is 9 months when stored at 20°C from date of manufacturing in factory sealed canister.
- Store in cool & dark shaded place away from the sunlight in tightly closed condition. Product is packed in canister with pressure of 5-6kg/cm @25°C.
- Ensure that temperature won't exceed 50°C during storage & transportation to avoid explosion

Packing

750 ml Canister

(Due to continuous product improvements, the data mentioned in this TDS herein, supersedes all earlier versions and, subject to change without prior intimation)

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