

Electrical Joint Compound



Where is BX1 3kg Bucket Used?

BICON BX1 Bucket should be used in all aluminium to aluminium and aluminium to copper joints. The contact surfaces of the elements to be joined should be thoroughly scratch brushed. The BICON BX1 Bucket should be liberally applied and any excess removed after securing the joint.

BICON BX1 Bucket should be used for all applications where insulation will not be applied to the joint, such as substations and switchgears.

BX1 3kg Bucket

BICON Inhibitor compounds are designed to prevent galvanic corrosion and to enhance connections in electrical joints. They are especially effective when used on copper to aluminium and aluminium to aluminium connections.

In general BICON Inhibitor Compounds consist of a liquid base vehicle in which zinc particles are suspended. The base vehicle is a natural or synthetic grease which prevents water and other contaminants from influencing the connection and prevents the formation of surface oxides. The zinc particles help to break down existing oxide on the conducting surfaces when those surfaces are brought together under pressure. These particles form electrical bridges which improve the connection.

BICON BX1 Bucket has a natural (petroleum) grease base. It is recommended for all bare outdoor applications because of its excellent weathering properties. This petroleum base reacts chemically with rubber insulation and to a lesser degree with polyethylene insulation. The result is swelling and a reduction in the tensile characteristics of the insulation material. If reasonable care is taken to remove any excess from a connection, the resulting effect on insulating material is negligible.

Our experience shows that BICON BX1 Bucket Inhibitor Compound enhances the performance of electrical connections, particularly in aluminium to aluminium and aluminium to copper joints. The compounds, in bulk, are highly resistive, however, when applied as a thin film, with the aid of zinc particles, they decrease the contact resistance of a joint.

For material safety data sheet (see page two of this document)

FREE Technical Advisory Service

Etech maintains a free technical advisory service.

Enquiries concerning this and all other products should be directed via the sales office:- +44(0) 1744 762 931

The following are the chemical and physical properties of BICC-BX1:

Components: Aluminium Sterate Soap Mineral Oil. Zinc Dust.

Penetration: 290.

Dropping Point (min): 230 °F (110 °C).

Viscosity at 100 °F (CS): 305

Flash Point (min): 375 °F.

BICON BX1 3kg Bucket Electrical Joint Compound

MATERIAL SAFETY DATA SHEET

BX 1 INHIBITOR COMPOUND

U.N. No. Cast No. Index No. None None

Product Information

By Prysmian Cables and Systems
Trade/Type BX1 INHIBITOR COMPOUND/GREASE ("Penetrox")
Container Plastic tube / tub
Uses Corrosion inhibitor in electrical joints / connections.
Description Grey paste

Information on ingredients

Petroleum Oil 40-60%
 Metallic Zinc 40-60%

Hazards identification

Eyes: May cause irritation
 Skin: May cause irritation after prolonged exposure
 Ingestion: May cause diarrhea
 Inhalation: Viscous nature may cause respiratory blockage if inhaled.

First aid procedures

Eyes: Flush with water until residual material is gone. Seek medical help if irritation persists.
 Skin: Wash thoroughly with skin cleanser, followed by soap and water. Contaminated clothing should be dry cleans before re-use.
 Ingestion: Wash out mouth immediately. Seek medical help.
 Inhalation: Clear air passage. Seek medical help if respiratory difficulty persists.

MATERIAL SAFETY DATA SHEET

BX 1 INHIBITOR COMPOUND

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Fire fighting measures

Extinguishing Media: Foam, dry powder, halon, carbon dioxide, sand, earth and water mist
 Unsuitable Extinguishing Media: Water jet
 Protective Equipment: Self contained breathing apparatus

Accidental release measures

Personal Precautions: Wear gloves and protective overalls
 Environment: Do not allow entry into drains and water courses
 Spillage: Scrape up bulk, wipe up remainder and cover surface with absorbent material (diatomaceous earth) to avoid slippage hazard.

Handling and Storage

Handling: No special requirements. Product has indefinite shelf life if stored in original packaging.
 Storage: Do not store at elevated temperatures

Exposure controls

Respiratory Protection: None required
 Hand Protection: Protective gloves
 Eye Protection: Glasses if applied to moving parts
 Body Protection: Overalls

Physical and Chemical properties

Physical Form: Semi-solid(paste)
 Colour: Grey
 Odour: Faint petroleum

Chemical Details

Chemical formula		Ignition temp		Boiling point	316 C
Molecular weight		'Explosive limits	0.9%, 7%	Evaporation point	
Decomp prod		Decomp temp	Upper	Flash point	221 C
Refractive index		Viscosity in liquid		Ignition temp of dust	
Melting Point	Non Melting	SG of liquid		Solubility in water	Negligible
Vapour pressure	<0.01kPa	Pour point	1.78 kg/m3	Ph Hydroscopic	N
Saturation level					

Stability and reactivity

Stability: Stable under normal conditions
 Conditions to avoid: Powerful sources of ignition
 Materials to avoid: Strong inorganic and organic acids and oxidising agents
 Hazardous decomposition products: Smoke, airborne soot, hydrocarbons and oxides of carbon. Residue comprises soot and metal oxides.

Toxicological information

Irratancy (skin): Very mild

Ecological information

May generate oil fractions that could act as a marine pollutant in extreme cases (highly unlikely)

Disposal considerations

Do not incinerate. Disposal as per local regulations (approved landfill)

Transport information

Not classified as hazardous for transport

Regulatory information

CHIP: R22 : Harmful if swallowed