

# TECHNICAL DATA SHEET

## CONSTRUCTION CHEMICALS MITRE-FAST CYANOACRYLATE ADHESIVE

### PRODUCT DESCRIPTION

Construction Chemicals Mitre-Fast Cyanoacrylate adhesive is an ethyl Cyanoacrylate adhesive of high viscosity. It is especially suitable for bonding irregular or porous components with excellent gap filling properties.

### APPLICATIONS

- Specially formulated for kitchen fitting application
- An excellent general purpose grade
- Bonding of MDF and veneered wood surfaces
- Bonds in seconds; rubbers, plastics, metals and ceramics

### BENEFITS

- Single component adhesive
- 100% solvent-less
- Slower cure allows adjustment during assembly
- High impact strength
- Vertical surface use, plus gap filling up to 0.25mm

### PERFORMANCE DATA, TYPICAL VALUES

#### **Steel/Steel substrate values**

Tensile strength (ASTM D2095)	22-26 N/mm <sup>2</sup> (3600-4400 lbf/in <sup>2</sup> )
Tensile shear strength (ASTM D1002)	13-18 N/mm <sup>2</sup> (2300-2700 lb/in <sup>2</sup> )
Impact strength (ASTM 950)	2 – 2.5 N/mm <sup>2</sup> (9-11 lb/in <sup>2</sup> )

#### **Physical properties of liquid adhesive**

Monomer	Ethyl cyanoacrylate
Appearance	Colourless
Specific gravity	1.08
Viscosity @ 25°C (Brookfield)	1300 – 1700 cPs
Flash point (Cleveland open cup)	> 85°C
Shelf life (Stored below 25°C)	12 months minimum
Toxicity	Non-toxic

#### **Physical properties of cured adhesive**

Refractive index (ND20)	1.46
Hardness (Rockwell)	85
Specific resistance OHM/cm	8 x 10 <sup>12</sup>
Dielectric constant @ 1MHZ	3.44
Softening point	150°C



## **DIRECTIONS FOR USE**

seconds or as indicated below. Cure speed is rapid, so exercise care when aligning. Cure performance can be enhanced if necessary, by using selected activators.

## **TYPICAL BONDING TIMES**

Wood (mdf)	up to 10 seconds
Plastics	5 – 60 seconds depending on substrates
Rubbers	2 – 20 seconds depending on substrates
Metals (degreased)	10 – 60 seconds depending on substrates

## **LIMITATIONS**

Ensure surfaces are degreased prior to bonding.

Ensure surfaces are close fitting.

This product is not suitable for permanent glass bonding, or applications where the bonded joint may be immersed in water.

## **RELATIVE HUMIDITY CONDITIONS**

Where possible, the working environment should have a relative humidity of 50%+.

## **CAUTION**

Prior to use, consult relevant Material Safety Data Sheet.

When continuously used, local fume extraction is recommended.

Contains Cyanoacrylate ester. Use in a well-ventilated environment.

In the event of inadvertent skin bonding, separate bonded skin tissue carefully by peeling apart gently with a blunt instrument, preferably after soaking in warm soapy water.

Keep out of reach of children.

## **STORAGE**

Store in original sealed upright container between +3°C and 20°C in a dry area out of direct sunlight.

The lower the temperature, the longer the ultimate shelf life, but bring to room temperature before use.

## **PACKAGING**

Available in 50g packs.

## **DISCLAIMER**

Construction Chemicals accepts no liability for loss or damage arising directly or indirectly from the use of this product. The data given is for information only and is based upon data we believe to be accurate and reliable. Before using any product, it is the customer's responsibility to satisfy themselves by appropriate trials that each product is suitable for their intended use. As the application and use of the product is outside the control of Construction Chemicals, the user assumes all risk and liability whatsoever in connection herewith.

All materials supplied are subject to our standard terms and conditions of trading, a copy of which is available upon request.

Working temperature range                      -55°C to +80°C

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE & OF THE COMPANY UNDERTAKING

Identification of the substance: Mitre Mate Activator  
Purpose of use: Bonding aid for use with Mitre Mate cyanoacrylate adhesive

Manufacturing Info: CONSTRUCTION CHEMICALS UK LTD  
75 TOWN GREEN STREET, ROTHLEY, LEICESTER LE7 7NW  
Telephone: 0116 230 1955

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Component:	CAS No:	% by weight
Isopropanol (propan-2-ol)	67-63-0	50-90
Propane		74-98-6 5-20
Isobutane	75-28-5	2-10
Butane	106-97-8	5-20

### 3. HAZARDS IDENTIFICATION

Hazard identification: F+, R12: Extremely flammable  
Xi: irritant  
R36 Irritating to eyes  
R67 Vapours may cause drowsiness and dizziness  
Further information: Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50C. Do not pierce or burn, even after use. Do not spray on a naked flame or any incandescent material

### 4. FIRST AID MEASURES

Inhalation: Remove subject to fresh air. Perform artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention  
Eye contact: Flush eye immediately with copious quantities of water for at least 15 minutes-assure adequate flushing by separating the eyelids with clean fingers. If irritation persists, seek medical attention  
Skin contact: Wash the skin thoroughly with soap and water. If irritation persists, seek medical attention  
Ingestion: Do not induce vomiting. Give water to drink. Seek prompt medical attention. Provide the subject with rest, warmth and fresh air

### 5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Dry powder, foam, carbon dioxide, water spray, sand  
Particular danger from combustion: Aerosol cans may explode in a fire (or if heated). Use water spray to cool cans close to any fire. CO and/or CO<sub>2</sub> may be produced during a fire  
Special protective equipment: For large quantities, self-contained breathing apparatus and protective clothing

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautionary measures: Refer to section 8 – personal protection. Eliminate all sources of ignition and heat. For large spills, evacuate the area and ensure good ventilation if possible do not breathe vapour/spray. Wear self contained breathing apparatus if necessary. Wear suitable protective clothing  
Environmental protection measures: Do not allow material to enter drains or watercourses  
Procedure for cleaning/absorption: Contain spillage with sand or other inert absorbent material, sweep up into a closed container and dispose of by incineration in suitable chamber

### 7. HANDLING AND STORAGE

Handling: Eliminate all sources of ignition including static discharge and heat – no smoking- Do not spray on a naked flame or any incandescent material Ensure good ventilation – do not breathe vapour/spray. Wear safety goggles Gloves are advisable. If handling large quantities, wear suitable protective clothing  
Storage: Store upright in a cool, dry, well ventilated place out of direct sunlight. Pressurised containers: do not expose to temperatures exceeding 50 C. Do not pierce or burn even after use

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits: OES for isopropanol of 400ppm (8hr, TWA) is recommended; STEL is 500ppm (15 mins)  
Personal protection measures -  
Skin protection: Ensure good ventilation – Local Exhaust Ventilation may be required especially in confined spaces, to maintain vapour concentration below TLV. Self-contained breathing apparatus may be required in extreme cases  
Eye protection: Wear safety glasses/goggles  
Other information: Ensure water for eye-washing is available. Wash hands after use

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Aerosol which emits a clear spray  
Odour: Light, characteristic of rubbing alcohol  
PH:  
Boiling point/  
boiling point range:  
Flashpoint (°C): -40 C  
Flammability:  
Explosive limits: lower: 1.8upper: 12.7  
Auto ignition temps: 410 C  
Relative vapour density: 2.7 (air =1)  
Vapour pressure: (mmKg @ 20C) 33.0  
Evaporation rate (DEE=1) 2.8  
Solubility in water: Slightly soluble  
Additional information: Soluble in alcohols, ether

## 10. STABILITY AND REACTIVITY

Conditions to be avoided: Flames, sources of ignition and heat  
Substances to be avoided: Strong oxidising agents, alkalis and mineral acids  
Hazardous products of combustion  
Or decomposition: CO, CO2 and trace amounts of oxides of nitrogen  
Product is very stable under normal conditions

## 11. TOXICOLOGICAL INFORMATION

Toxicity: Oral LD50 – rat: 5840mg/kg  
Inhalation -  
Skin -  
Other -

Acute effects: Irritating to eyes, vapours may cause drowsiness and dizziness. Prolonged over-exposure to vapours may irritate respiratory system. Vapours may cause CNS depression, nausea, sickness and headaches

Other info: Prolonged and repeated contact can lead to drying and defatting of the skin

## 12. ECOLOGICAL INFORMATION

No data

## 13. DISPOSAL RECOMMENDATIONS

Product: Pressurised container: Do not pierce or burn, even after use. Dispose of according to national and local regulations  
Contaminated packaging: As above

## 14. TRANSPORT INFORMATION

UN No 1950  
IATA Class 2.1  
MDG No 2102; Class 2, EmS No 2-13; MFAG Tab No 620; Not a marine pollutant  
ADR/RID Class 2.1, Item 5°F, Marginal No 2201  
Proper shipping name: Aerosols, flammable, nos (contains LPG)

## 15. REGULATORY INFORMATION

Symbols for supply and indication of danger: EXTREMELY FLAMMABLE, IRRITANT

Risk phrases: R12 Extremely flammable  
R36 Irritating to eyes  
R67 Vapours may cause drowsiness and dizziness

Safety phrases: S 2 Keep out of the reach of children  
S16 Keep away from sources of ignition – no smoking  
S23 Do not breathe vapour/spray  
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  
S51 Use only in well ventilated areas

## 16. OTHER INFORMATION

The data presented in this sheet corresponds to the present level of our knowledge and experience and is intended to describe our product with respect to possible safety demands. We imply with this however no guarantee of properties or description of qualities. It remains the customer's responsibility to ensure safe working practices. Attention is drawn to the possible hazards from improper use of this product.