CORPORATE OFFICE:

G-73 Connaught Circus, New Delhi-110001 (INDIA)
T: +91-11-45306666 | F: +91-11-45306677

E: enquiry@marvelvinyls.com, corp@pvcinsulationmat.com

VOLTSAFE INSULATING MATS

SHOCKSAFE INSULATING MATS

IS : 15652:2006

CM / L : 2519758

Marvel
IMPACTING YOUR LIFE SINCE 1985

INSULATION MAT

2015-2016

WWW.MARVELVINYLS.COM

VOLTSAFE INSULATING MATS

SHOCKSAFE INSULATING MATS

MARVEL'S ELECTRICAL INSULATION MAT

Marvel's electrical insulation mats are lifesaving mats that offer complete protection from electric shocks for people working around electrical installations. Our mats have high insulation resistance, making them ideal for use in both AC&DC panels.

We at Marvel, have developed a proprietary formulation for our Volt-safe and Shock-safe mats to ensure it is not just a regular electrical mat but a complete lifesaving mat for electrical installations! These mats are manufactured using materials with high Di-electric strength & can withstands Voltages up to 65kV AC & 240V DC.

Shock-safe mats are fully compliant with BIS (Bureau of Indian Standards), while Volt-safe mats are fully compliant with Indian / National / International Standards ASTM(American Society for Testing and Materials), IEC(International Electro technical Commission), BIS(Bureau of Indian Standards).

Marvel Vinyls offers elastomer PVC mats under two brand names. "Shock-safe" and "Volt-safe" to meet the varying requirements of our clients. Both Shock-safe and Volt-Safe high voltage insulating mats are manufactured using state-of-the-art machinery and pass through vigorous quality controls. Our technical team ensures that no stone is left unturned in getting the right product to our end users.

We also offer customized solutions according to our customer requirements.

*Terms and conditions applied

VOLTSAFE INSULATING MATS

SHOCKSAFE INSULATING MATS

HOME

Marvel Group is a business house with interest in PVC processing, Healthcare and Leasing. Marvel Vinyls Ltd, considered a leading manufacturer of PVC products amongst its other peers in the industry, offers a range of products including PVC flooring, sheeting, films and leather cloth.

We are renowned for our superior quality, robust products, durability, cost effectiveness and hassle-free installations. At Marvel Vinyls, we house a dedicated and competent team of professionals who are highly keen in fulfilling the clients' requirements and achieving the objectives of the organization. We are putting our sincere efforts to expand ourselves in all its verticals of the group with the best quality products and constantly striving to achieve new benchmarks of success in the industry.

WHY MARVEL?

Marvel Vinyls has earned a huge client base and carved a niche for itself as one of the India's biggest PVC product manufacturer, having a fully utilized capacity of 3900 MT/Month. .

With more than three decades of experience compiled with a perfect blend of the finest technology, professional expertise and sound management, including the zeal for customer satisfaction, Marvel Group aims for a long-term association with its customers.

OUR PRODUCT RANGE

- Shock-safe Insulating Mat
- Volt -safe Insulating Mat
- Anti-Static Flooring
- Anti-Skid Stud Flooring
- Conductive Flooring
- Supported Floorings (which are Jute Backed, Jute Felt Backed, PP Backed and Non Woven Backed)
- Heavy Duty Flexible Flooring
- Luxury Wooden and Printed Flooring
- Designer Printed Flooring
- Synthetic Leather
- PVC Sheets and Films
- Technical Coated Textiles
- Customized Specialty Coatings (for several applications like fire resistance, blackout, water repellant, etc.)

OUR CAPABILITY

Our products are ISO certified which offer great durability and absolute reliability, living up to all the tests for quality assurances. The raw materials undergo thorough tests before putting them into the manufacturing process. Thanks to our vigilant team, which is leaving no stone unturned to produce sustainable, innovative and environment friendly products.

SHOCK-SAFE?

Shock- safe insulating mats by Marvel is a shock proof and fire resistant product, which is designed to provide safety to people and their property from the unanticipated electric shocks and leakage current up to 10mA and 33KV.
Our Shock -safe insulating mat (has replaced Rubber Mat as per IS 5424:1969 according to Govt. Notification S.O. 2086 Dated 17th July 2007) carries water repellant properties and provides complete protection to people from electrical equipments, thereby fulfilling the parameter/requirement of IS 15652: 2006

Our Shock-safe insulating mat combines good mechanical attributes to be able to hold up against the movement and load of associated electrical apparatus. Since safety of workers is of utmost concern to us, we highly recommend our Shock-safe mats to clients who have to ensure the safety of their workforce against electric shocks and for use around control panels, electrical installations, generator rooms, sub-stations operating HT & LT switch gears, power plants, battery rooms and other such precarious situations.

Available in two colors viz. Black and Blue along with the customized range on order, the mat has also proven to be of immense help to the organizations that are conscious for their safety from electricity and fire and where human life is given due precedence.

SALIENT FEATURES

- Fire-resistant
- Shock proof
- Designed using 100% virgin compound
- Adhere to IS 15652:2006
- Insulation-resistance up to 1000000 Mega Ohm
- Withstand great physical properties to be able withstand instrument movement engaged in foot traffic and electrical apparatus
- Endowed with moisture and water repellant properties
- Demonstrate good tensile strength and elongation properties
- Can be easily installed/pasted on floors when needed Easy to maintain
- Customization offered as per customers requirement.

CLASSIFICATION

Shock-safe mats for electric applications can be classified into three categories based on the thickness, viz.

Sl. No.	Classification	Usage Voltage	Thickness
01	A	Up to 3.3 KV	2.0 (mm)
02	B	3.3 to 11 KV	2.5 (mm)
03	C	11 to 33 KV	3.0 (mm)

VOLT-SAFE

Volt safe insulation mats are made as per IS 15652:2006 . It was introduced as a result of technological advancement in the industry, with the view to set up more stringent safety measures so that any possible accident can be avoided. Apart from being BIS compliant, Volt-safe mats offer many exclusive properties making it completely electrically insulated and shock-proof. Volt-safe mats are increasingly being used in different kinds of industries; namely Transformer Rooms, Electric Sub-Stations, Switch Gear Rooms, Lift-Machine Rooms, Transformer Rooms, X-Ray Plant Rooms, Electrical Panel Rooms, LT/HT Labs, AC Plant Rooms, Power plant Generator Rooms, and others.

Volt-safe mats are of great help in safeguarding the lives of the technicians, electricians and the rest of the workforce. In case there is any accidental leakage of current while working on DC or AC installations, it is the Volt-safe insulation mat that ensures complete safety of the workers from any fatalities.

CLASSIFICATION

Volt-safe mats for electric applications can be classified into three categories based on the thickness, viz.

Sl. No.	Classification	Usage Voltage	Thickness
01	A	Up to 3.3 KV	2.0 (mm)
02	B	3.3 to 11 KV	2.5 (mm)
03	C	11 to 33 KV	3.0 (mm)

- **COLOR** – Preferred colors are Blue and Black and other colors are also available on customers' request.
- **DIMENSIONS** – The standard width is usually 1 meter and standard length is 5 meters, supplied in a roll form. Different sizes are also available as per the need of the customers.

EXCLUSIVE PROPERTIES OF VOLT-SAFE

- The Volt-safe insulation mats come with a superior sound absorption property up to a minimum frequency of 4 decibels certified using the test method ISO-140-8. In addition to creating breakdown of communication amongst the workers, high levels of noise can cause impaired hearing and other illnesses related to absenteeism. The Volt-safe mat with its sound absorption property could easily overcome different types of noise and vibrations resulting from high frequency sound.
- Abrasion resistance is an attribute of supreme importance for the insulation mats which prevents the loss of volume or material used in the designing of mat and gives extreme foot comfort along with long-term durability and effectiveness. Marvel's Volt-safe insulation mats certified by ISO-9352 are equipped with abrasion resistance volume loss of only 0.25 cubic cm (maximum) with H18 abrasion wheel of 1,000 Gms of load and 1,000 cycles with taber equipment.
- Flame retardancy is a key feature of the Volt-safe insulation mats by Marvel, which means the mats, can easily combat the destructive impacts of the fire on people, property and environment. These mats certified by ISO-13501 can easily limit the Oxygen index at 28 (min.), thereby disrupting the combustion stage of the fire cycle.
- Marvel's Volt-safe insulation mats which belong to Class-B category (Appendix 15 of VIC-564-2) also help combat the harmful effects of smoke that result after the break out of fire. As smoke deteriorates the vision and when inhaled can cause health hazards, the Volt-safe insulation mats are designed so to protect people from every possible risks involved at the working conditions or the living spaces.

SALIENT FEATURES:

- Easy installation
- Hassle-free maintenance
- High durability
- Certified by IS 15652:2006
- Manufactured using state-of-the-art machinery
- Tested under reputed laboratory ERDA AND CPRI
- Suitable for both DC & AC electrical installations
- Excellent insulation mechanism up to 10,00,000 M with 500 V Meggar

REPLACED OUTDATED RUBBER MATS

High voltage insulating Mat as per IS 15652:2006 has superseded rubber mats with IS 5424:1969 (old Std.) as per Govt. of India Gazette Notification No.:- S.O. 2086 dated 17th July, 2007.

- Marvel's high voltage insulating mat having insulation resistance of (1000,000 mΩ) with 500v Meggar.
- Marvel's insulating mat is suitable for person working around high voltage panels (AC & DC) installation from earth leakage current up to 10 MA.
- Marvel's insulating mat is best suited for control panels, transformer rooms, sub-stations operating HT & LT switch gears, generator rooms, battery rooms, power plants etc.

PRODUCT PROFILE

Recommended Thickness & Voltage as per IS 15652 : 2006

Sl. No.	Recommended Thickness	Class	Usages Voltage
01	2.0 (mm)	A	Up to 3.3 KV
02	2.5 (mm)	B	3.3 to 11 KV
03	3.0 (mm)	C	11 to 33 KV

TYPICAL FEATURES OF PVC MATS

- High Insulation resistance upto 1000,000 MΩ with 500 V meggar.
- High Di-electric strength.
- Tested by ERDA test house for power in INDIA.
- Suitable of AC & DC electrical Installations to protect the workers from earth leakage current.
- High tensile strength and elongation Properties.
- Manufactured without any metallic derivatives.
- Good mechanical properties to withstand load and movement of breaker.
- Suitable for both A.C. & D.C. Electrical Installations

VOLTSAFE INSULATING MATS

SHOCKSAFE INSULATING MATS

IS : 15652:2006

CM / L : 2519758

COMPARISON

MARVEL'S INSULATION MATS

- As per 1S 15652 : 2006 with date of use is 1st Nov 2007 as per Govt. of India Gazette notification No. SO. 2084.

NOT AFFECTED BY

a) Transformer oil
b) Alkali
c) Diesel
d) Acid

- Fire Retardant
- High resistance of 1000,000 MΩ with 500 V meggar
- 36 KV for 1 minute for 3mm
- Light in sizes
- 2mm, 2.5mm & 3mm
- Life upto 15 years as per IS 15652:2006
- Easy to clean
- B/down voltage 65 KV for 3mm mat

MANDATORY FOR USE

- As per CPWD general specifications for electrical work part IV substation 2007.
- Central Electricity authority CEA notification No. CE1|1|59|CEA|E1 dated 20th Sep 2010.

RUBBER MATS

- As per 1S 5424 : 1969 with drawn by BIS.

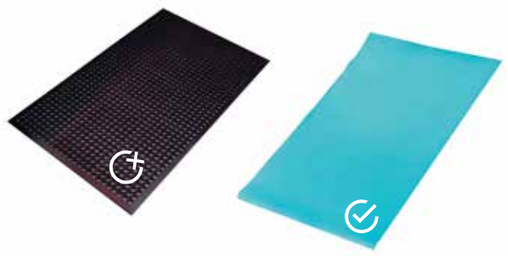
AFFECTED BY

a) Transformer oil
b) Alkali
c) Diesel
d) Acid

- Hammeble & fire catching
- Poor Resistance
- Withstand voltage 15 KV for 1 minute
- Heavier in sizes
- 10mm, 12mm, 20mm
- Life span maximum 3 years
- Can't be cleaned
- B/down voltage 4.5 KV

MANDATORY FOR USE

- Withdraen obsolete with no agency specified the use of rubber mats at present.



FEATURES AND SPECIFICATIONS AS PER IS 15652:2006

SL.NO.	CHARACTERISTICS	STANDARD VALUES		
01	THICKNESS	2.0 mm	2.5 mm	3.0 mm
02	TENSILE STRENGTH (N/MM²)	15	15	15
03	ELONGATION (%)	250	250	250
04	INSULATION RESISTANCE WITH WATER AT 500 V	1,000,000 M Ω	1,000,000 M Ω	1,000,000 M Ω
05	LEAKAGE CURRENT	10 mA at 3.3 KV	10 mA at 11 KV	10 mA at 33 KV
06	AC DI ELECTRIC STRENGTH	30 KV	45 KV	60 KV
07	AC PROOF VOLTAGE	10 KV withstand for 3 min.	22 KV withstand for 3 min.	36 KV withstand for 3 min.
08	FLAME RETARDANCE	5.0 sec	5.0 sec	5.0 sec
09	EFFECT TO ACID, ALKALI, DIESEL & TRANSFORMER OIL	% Change from Original Value	% Change from Original Value	% Change from Original Value
	ACID: TENSILE STR. (N/MM²) ELONGATION (%)	Tensile strength ± 20%	Tensile strength ± 20%	Tensile strength ± 20%
	ALKALI: TENSILE STRENGTH. (N/MM²) ELONGATION (%)			
	DIESEL: TENSILE STRENGTH. (N/MM²) ELONGATION (%)	Elongation ± 20%	Elongation ± 20%	Elongation ± 20%
	T. OIL: TENSILE STRENGTH. (N/MM²) ELONGATION (%)			
10	AGEING PROPERTIES AT 70±1° C FOR 168 HRS.	% Change from Original Value	% Change from Original Value	% Change from Original Value
	TENSILE STRENGTH. (N/MM²)	T.S. ±25%	T.S. ±25%	T.S. ±25%
	ELONGATION (%)	E. ±25%	E. ±25%	E. ±25%

CERTIFICATIONS

भारत का राजपत्र
The Gazette of India

मानकः पथप्रदर्शकः

dun & bradstreet
GROWING RELATIONSHIPS THROUGH DATA

INSTALLATION /MAINTENANCE GUIDE

Insulation mat looks the best when laid on a smooth floor properly which is only possible when appropriate measures are taken to ensure proper placement of PVC mats by well equipped and skilled team.

CONDITIONS AND REQUIREMENT

Sub floor should be smooth, flat, rigid, free of stains. and should not be contaminated. In case there is unevenness, you should use a latex self-leveling compound to bring evenness. For maximum benefit and efficient fixing, we recommend a skin of Ardex feather that will give the surface maximum smoothness.

For placement on **WOODEN SURFACE**, our technical team recommends you uninstall all previous floor coverings and then use Ardex feather for smoothening.

FOR CONCRETE FLOOR the moisture level should not exceed 75% RH when tested with a hygrometer. Please note that if placement is on new concrete then drying can take up to 4 months.

UPON receiving our **VOLT-SAFE / SHOCK-SAFE** elastomer mats, kindly ensure it is stored in an ambient temperature 48 hours prior to installation. (18-22 degree Celsius)

STEPS TO BE FOLLOWED FOR INSTALLATION

We strongly recommend you to use Marvel's in-house technical trained team for fixing as our fixing workforce uses certified equipments and is constantly trained on technical advancements of fixing the mats. Our in–house team ensures that fixing is done properly so product characteristics are not compromised at any stage.

In case you decide to use your own resource of fixing, we recommend you follow following steps meticulously:

ADHESIVE: we suggest you use SR 998 OR SR 505 suitable for fixing insulating mats. It is not advisable to use any other adhesive as it may compromise product characteristics. With companies, like pidilite constantly coming out with new products, we recommend you subscribe for our newsletters so we can update you on latest industry developments.

PREPARATION OF SUBFLOOR: As Subfloor stands as the most important part of the process, it should be properly cleaned, dry without any moisture, properly leveled and free from cracks.

CRACKS: Cracks must be filled properly with appropriate material that does not cause any obstruction in fixing the Insulation mat.

DRYNESS: To ensure dryness, and zero moisture we apply a special coat of water proofing that also protects the insulation mat from any damage.

EVEN SURFACE: It is to be ensured surface is even using cement based screeds.

ADHESION: After ensuring surface is fully dried, apply a special coat of SR 998 or SR 505 on both the surface and back of insulation mat to ensure the bonding between floor and insulation mat is effective.

PLACEMENT OF MAT: After adhesive is pasted properly, start pasting the PVC mat onto the floor carefully in a linear direction.

HOT WELDING: A special PVC cord of same color and same insulation properties as per IS 15652:2006, is used to covered the joints to give a pleasant aesthetic look.

MAINTENANCE

For maintenance, we recommend mat be not exposed to direct sunlight for long hours. The high voltage insulation mats are not recommended to be placed in open areas.

Ensure regular cleaning of High voltage mats with commonly used detergents, to ensure longevity and pleasant appearance.

Govt. Notification

रजिस्ट्री सं. डी. एल. (एन) 04/0007/2003—05 REGD. NO. D. L. (N) 04/0007/2003—05

भारत का राजपत्र
The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

साप्ताहिक
WEEKLY

सं. 30] नई दिल्ली, जुलाई 22—जुलाई 28, 2007, शनिवार/आषाढ़ 31—श्रावण 6, 1929
No. 30] NEW DELHI, JULY 22—JULY 28, 2007, SATURDAY/ASADHA 31—SRAVANA 6, 1929

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह पृथक संकलन के रूप में रखा जा सके
Separate Paging is given to this Part in order that it may be filed as a separate compilation

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

भारत सरकार के मंत्रालयों (रक्षा मंत्रालय को छोड़कर) और केन्द्रीय अधिकारियों (संघ राज्य क्षेत्र प्रशासनों को छोड़कर) द्वारा विधि के अंतर्गत बनाए और जारी किए गए साधारण सांविधिक नियम (जिनमें साधारण प्रकार के आदेश, उप-नियम आदि सम्मिलित हैं)

General Statutory Rules (Including Orders, Bye-laws etc. of a general character) issued by the Ministries of the Government of India (other than the Ministry of Defence) and by the Central Authorities (other than the Administrations of Union Territories)

वित्त मंत्रालय

(राजस्व विभाग)

केन्द्रीय उत्पाद शुल्क आयुक्त का कार्यालय, कोलकाता-VII आयुक्तालय

कोलकाता, 25 जून, 2007

संख्या-01/2007-सीमाशुल्क (एनटी)

का.आ. 2057.—सीमा शुल्क अधिनियम 1962 (1962 का 52) की धारा 9 के तहत प्रदत्त शक्तियों का प्रयोग करते हुए जिसे भारत सरकार, वित्त मंत्रालय, राजस्व विभाग, नई दिल्ली की अधिसूचना संख्या 33/94 सीमाशुल्क (एनटी) दिनांक 1-7-1994 तथा एम.एफ. (डी.आर.) परिपत्र संख्या 31/2003 सीमाशुल्क दिनांक 7- 4-2003 एवं अधिसूचना सं. 83/2004-सीमा (एनटी) दिनांक 30-6-2004, के साथ पढ़ा जाए, क्षेत्र संख्या-2 डॉ बी.सी.राय रोड, दाग संख्या 3195 से 3200 मौजा, जगतदल, जे.एल. संख्या-71 थाना-सोनारपुर, नगरपालिका, राजपुर, जिला-दक्षिण 24 परगना, पश्चिम बंगाल को एतद्द्वारा विकास आयुक्त, फलता विशेष आर्थिक क्षेत्र वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार, कोलकाता द्वारा यथा अनुमोदित सीमित प्रयोजन हेतु 100 प्रतिशत निर्यातोन्मुखी उपक्रम के रूप में भंडारण केन्द्र घोषित किया जाता है।

[सी. सं. V(30)7-के.उ.शु./तक/डब्ल्यू एस पी एल/कोल-VII/07]

एस. बी. मिश्र, आयुक्त, केन्द्रीय उत्पाद शुल्क

इस भारतीय मानक की प्रतियाँ भारतीय मानक ब्यूरो, मानक भवन, 9, बहादुर शाह जफर मार्ग, नई दिल्ली-110002, क्षेत्रीय कार्यालयों : नई दिल्ली, कोलकाता, चण्डीगढ़, चेन्नई, मुम्बई तथा शाखा कार्यालयों : अहमदाबाद, बंगलौर, भोपाल, भुवनेश्वर, कोयम्बतूर, गुवाहाटी, हैदराबाद, जयपुर, कानपुर, नागपुर, पटना, पुणे तथा तिरुवनन्तापुरम में बिक्री हेतु उपलब्ध हैं।

[संदर्भ: ईटी 02/टी-154]

पी. के मुखर्जी, वैज्ञा. एफ एवं प्रमुख (विद्युत तकनीकी)

New Delhi, the 17th July, 2007

S. O. 2086.—In pursuance of clause (b) of sub-rule (1) of Rule 7 of the Bureau of Indian Standards Rules, 1987, the Bureau of Indian Standards hereby notifies that the Indian Standards, particulars of which are given in the Schedule hereto annexed has been issued

SCHEDULE

Sl. No.	No. and Year of the Indian Standards	No. and year of the Indian standards, if any, Superseded by the New Indian Standard	Date of Establishment
(1)	(2)	(3)	(4)
1.	IS 15652 : 2006 Insulating mats for electrical purposes —Specification	IS 5424 : 1969 Specification for rubber mats for electrical purposes	01 November, 2007

Copy of this Standard is available for sale with the Bureau of Indian Standards, Manak Bhavan, 9, Bahadur Shah Zafar Marg, New Delhi-110002 and Regional Offices : New Delhi, Kolkata, Chandigarh, Chennai, Mumbai and also Branch Offices : Ahmedabad, Bangalore, Bhopal, Bhubaneshwar, Coimbatore, Guwahati, Hyderabad, Jaipur, Kanpur, Nagpur, Patna, Pune and Thiruvananthapuram.

[Ref.: ET 02/T-154]

P. K. MUKHERJEE, Sc. F & Head (Electro Technical)

नई दिल्ली, 17 जुलाई, 2007

का. आ. 2087.—भारतीय मानक ब्यूरो नियम 1987 के नियम 7 के उप-नियम (1) के खंड (ख) के अनुसरण में एतद्द्वारा अधिसूचित किया जाता है कि जिस भारतीय मानक का विवरण नीचे अनुसूची में दिया गया है, वह रद्द कर दिया गया है और वापस ले लिया गया है:

अनुसूची

क्रम सं.	रद्द किये गये मानक की संख्या और वर्ष	भारत के राजपत्र भाग II, खंड 3, उप-खंड (ii) में का. आ. संख्या और तिथि प्रकाशित	टिप्पणी
(1)	(2)	(3)	(4)
1.	आईएस 12819:1989	0157, 19-1-1991	—

[संदर्भ : ईटी 03/टी-26]

पी. के. मुखर्जी, वैज्ञानिक एफ एवं प्रमुख (विद्युत तकनीकी)

New Delhi, the 17th July, 2007

S. O. 2087.—In pursuance of clause (b) of Sub-rule (1) of Rule 7 of the Bureau of Indian Standards Rules, it is, hereby notified that the Indian Standard, particulars of which is mentioned in the Schedule given hereafter, has been cancelled and stand withdrawn.

SCHEDULE

Sl. No.	No. and Year of the Indian Standards Cancelled	S.O. No. and Date published in the Gazette of India Part II, Section-3, Sub-section (ii)	Remarks
(1)	(2)	(3)	(4)
1	IS 12819:1989	0157, 19-1-1991	—

[Ref : ET 03/T-26]

P. K. MUKHERJEE, Scientist F & Head (Electro Technical)

भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
Bhopal Branch Office

पता Address: व्यवसायिक एवं कार्यालय
दशहरा मैदान के सामने
ई-5, अरेरा कालोनी, बिट्ट
भोपाल 462 016, भारत
Commercial-cum-office C
E-5 Arera Colony,
Bhopal-462016

दूरभाष Phones : 0755-2423452, 2423449
फैक्स Fax: 0755-2423451
ई-मेल e-mail: bplbo@bis.org.in
वेब web : http://www.bis.org.in

ATTACHMENT TO LICENCE NO. CM/L – 2519758

सीएम/एल संख्या CML/NO	लाइसेंसधारी का पता सहित नाम NAME OF THE LICENSEE WITH THE ADDRESS	उत्पाद का नाम NAME OF THE PRODUCT	भा मा संख्या IS NO.
2519758	मेसर्स मार्वल विनायल्स लि., 84,इण्डस्ट्रियल एरिया,मालनपुर, भिण्ड – 477 117 (म प्र)	Insulating Mats for Electrical purposes,Class A Thickness 2.0mm, & Class C Thickness 3.0mm Category III,not suitable for extreme low temperature	आईएस 15652: 2006
2519758	M/s Marvel Vinyls Limited, 84, Industrial Area, Malanpur,Bhind – 477 117 Madhya Pradesh	Insulating Mats for Electrical purposes,Class A Thickness 2.0mm, & Class C Thickness 3.0mm Category III,not suitable for extreme low temperature	IS 15652: 2006

ENDORSEMENT NO. 04 DATED

The following additional varieties have been included in Columns(2) of the first schedule and column (1)of the the Second Schedule of the Licence alongwith the Standard Mark in Column (1) of First Schedule with effect from

"Insulating Mats for Electrical purposes, Class B ,Thickness 2.5mm,Category III, not suitable for extreme low temperature"

Other terms and conditions of the licence remain the same.

प्रीति भटनागर
PRITI BHATNAGAR
वैज्ञानिक - ई / Scientist-E
भारतीय मानक ब्यूरो, भोपाल
Bureau of Indian Standards, Bhopal

dun & bradstreet
GROWING RELATIONSHIPS THROUGH DATA

Rating Certificate

This is to certify that
Dun & Bradstreet Information Services India Private Limited ("D&B")
has evaluated

MARVEL VINYLS LIMITED

(D-U-N-S® Number 65-024-6150)
which has been assigned a
Dun & Bradstreet Rating of 4A3.

Note: The above Dun & Bradstreet Rating relates to the Business Scope dated 28th Aug 2015, issued by Dun & Bradstreet on the Rated Entity and the tangible networth has been derived basis the audited financial statements for the financial year ended 31st March 2014. Composite appraisal "5" indicates that the overall status of the Rated Entity is "Fair"

Authorized Signatory for Dun & Bradstreet

Date: 28th Aug 2015

Disclaimer: The Dun & Bradstreet (D&B) Rating must be considered in conjunction with the related D&B Report in order to avoid any wrong inferences derived by considering the D&B Rating in isolation. The D&B Rating is assigned and valid as of the date of evaluation of the D&B Report and is always subject to change on account of occurrence of any significant material events, including the availability of the latest audited financial statements, that may substantially affect the various parameters, basis which the D&B Rating has been derived.

The D&B Report includes assessment made by D&B which are based on various sources and the methodology adopted by D&B. D&B does not make any representation or warranty, whether express or implied, as to the accuracy, timeliness or completeness of any information, basis which the D&B Rating has been derived. Every business decision, to some degree or the other, represents the assumption of risk and D&B, in furnishing the Rating and the Report, does not and cannot underwrite or assume the risk, in any manner whatsoever.

The D&B Rating consists of two parts viz. the Financial Strength and the Composite Appraisal / Condition. Financial Strength is an indication of the tangible net worth (i.e. the shareholders' funds less any intangible assets). The Composite Appraisal / Condition is based on the broad risk and is an assessment of credit worthiness. It takes into account the financial condition and several factors such as trends, reference banks, legal structure, management experience and any adverse listings.


PUSH BUTTON

FAQ

Q 1 What is the advantage of Volt-Safe over Shock- Safe?
Shock-Safe/Volt-Safe is manufactured as per IS 15652: 2006. Both are tested by ERDA and CPRI in India. Our both offered products are manufactured instead of from imported machines with high quality control, ensuring safety of the workers working in and around electrical installations.

Q 2 How is the safety of workers ensured by using our Shock-Safe/Volt-Safe?
Workers are safe from electric shock and earth leakage current upto 33Kv using both Shock- Safe and Volt -Safe mats.

Q 3 What is the use of our Shock-Safe/Volt-Safe in Low Voltage/High Voltage Switchgears?
The Shock-Safe/Volt-Safe is placed in front of switchgears and electrical panels to protect the workers from electric shocks. These insulating mats are fixed in front of the panels using special adhesive.

Q 4 How is the generator, Sub-Stations, Transformer and Battery room areas protected by our High voltage insulation mats Shock-Safe/Volt-Safe?
Shock-Safe/Volt-Safe is as per IS 15652:2006 and is placed in front of generator panels and battery rooms for safety of working personnel as both Shock-safe and Volt-safe are tested up to 240 V D.C and are acid proof.

Q 5 Are Shock-Safe/Volt-Safe High voltage insulation mats anti-skid?
Our Shock-Safe/ Volt-Safe are anti skid with special coating. Anti skid helps the workers to operate the panels smoothly without fear of shock.

Q 6 Which agencies have made it mandatory to use High voltage insulation mats?
CPWD general specification for electrical works part –IV 2007 & Central Electrical Authority by CED Notification No. CE1/1/59/cea/e1 of 20th Sep 2010, published in Gazette of India.

Q 7 Recommended are of use for High voltage insulation mats?
Our high voltage Volt – Safe/ Shock-Safe can be used in all kinds of electric substations, transformer rooms, lift machine room, switch gear rooms, electrical Panel rooms, A.C plant rooms, X-Ray Plant rooms, LT/HT Labs, Power Plants, Generator rooms Etc.