



ITALTECNO
India Pvt. Ltd.

SURFACE TREATMENTS OF ALUMINIUM AND ITS ALLOYS

No. 42/1, VEERNAHALLI VIRGONAGAR, INDUSTRIAL AREA,
BANGALORE - 560 049 Tel: +91 80 41132797 / 98 /9845208950

| | | |
|---------------|---|-----------------------|
| TIN No. | : | 29750201311 |
| C.E. Reg. No. | : | AABCI2049DXM002 |
| GST No. | | 29AABCI2049D1ZU |
| CIN | | U02411KA2003PTC033025 |

To,
M/s. JINDAL ALUMINIUM LIMITED
SP-2/333, RICCO INDUSTRIAL AREA,, BHIWADI, ALWAR-301019 ,
RAJASTHAN , INDIA - Tel: 9611195368, 9057407027
purchase.bhiwadi@jindalaluminium.com

| | | |
|----------------|-----|-----------------|
| Pan No. | : | |
| GST | : | 08AAACJ4324M1ZH |
| Document Ref. | : | EN230203875 |
| Contact Person | Mr. | Rupesh Saini |
| Mobile | 91 | 7988507897 |

Quotation

| | | | | |
|------|-------------------|----------------|-----|------------|
| No. | Quot 042/22-23 | Contact Person | Mr. | Khan |
| Date | 23.02.2023 | Mobile | 91 | 9845208950 |

| Description | HSN Code | Unit | Qty | Price Per Kg | Amount in INR |
|--------------------------|----------|------|-----|--------------|------------------|
| MG 39 (Etching Additive) | 29054400 | KG | 400 | 128.00 | 51,200.00 |
| Total | | | | | 51,200.00 |

| | | | |
|--|----------------|-----|----------|
| Amount In Words: Sixty Thousand Four Hundred Sixteen Only | SGST | 0% | 0.00 |
| | CGST | 0% | 0.00 |
| | IGST | 18% | 9,216.00 |
| | Transportation | | |

| | | |
|-------------------------------|--------------------|------------------|
| Terms & Conditions | GRAND Total | 60,416.00 |
|-------------------------------|--------------------|------------------|

- 1). Delivery Terms: **Immediate**
- 2). Validity of Quotation: **06 Days**
- 3). Payments: **70% along with the PO and 30% Before Disapctch**
- 4). Price: **Ex-Works Bangalore**
- 5). Transporter: **VRL / Vtrans**
- 7). Insurance: **On To Customer's Account**

Note: We will dispatch the material as per our delivery terms, we will not take any responsibility of transport TRANSIT time. It will be at your responsibility.

CHECK LIST

| | | |
|-----------------|---------------------------|------------------------|
| 8) Bank Details | ITALTECNO INDIA PVT. LTD. | A/c. No. 625205014428 |
| DISCOUNT | ICICI BANK LIMITED | IFSC Code: ICIC0006252 |
| | | Cantonment Branch |

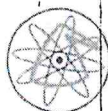
PRICE BASIS : FCR BHIWADI.....

P&F ✓ INCL - / EXTRA - **Extra**
For ITALTECNO INDIA PVT. LTD.
GST/IGST **18% EXTRA**
DELIVERY **7 DAYS.**
Sales Department
PAYMENT **70% Advance**



Note:
Our Corresponding address for Courier, Mail Etc.
66/7, 1ST Floor, Coles Road, Frazer Town
Bangalore - 560 005
Telephone: +91 80 41132797 / 98
Email: khan@italtecno.com / khan.italtecno@yahoo.co.in

GCWC/TC
VALIDITY **06 days**
CHECKED BY: **Anish**



ITALTECNO

TRATTAMENTI SUPERFICIALI DELL'ALLUMINIO E SUE LEGHE
SURFACE TREATMENTS OF ALUMINIUM AND ITS ALLOYS

Prodotti chimici, vernici in polvere, attrezzature e macchine. Progettazione e realizzazione impianti.
Chemicals, powder paints, equipment. Planning and construction of turn-key plants.



FOR THE FOLLOWING ACTIVITIES
Formulation, production and sale of chemical products and related technologies service for the metal surface treatment

INFORMATION DATA SHEET

MG 39

NEW SPECIAL ADDITIVE FOR LONG LIFE FLUID ETCHING SOLUTION WITH INCREASED SOLUTION FLUIDITY AND SUPERIOR MATT FINISHING

PRODUCT DESCRIPTION

- New formula for increased high bath fluidity.
- New formula that gives a superior matt finishing.
- MG 39 is a neutral liquid product used in the chemical etching process for aluminium. MG 39 is suitable for long life processes (no dump).
- This product is completely biodegradable and environmentally friendly.
- MG 39 allows a very nice finishing because it contains a special additive that avoids the phenomena of "galvanisation" caused by the accumulation of the heavy metals (Fe, Zn, etc.).
- MG 39 allows to work at high concentrations of dissolved aluminium.
- Generally the bath stabilizes at an aluminium content of 100 – 150 g/l, while the caustic soda must be kept between 60 and 100 g/l.
- If well applied MG 39 avoids the formation of stains on profiles of big dimensions or sheets.
- MG 39 is not dangerous for the waste and does not contain any chromates, fluorides, nitrates, nitrites or amines.

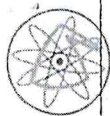
OPERATING CONDITIONS

| | | |
|-------------------------|---|-----|
| NaOH concentration | : 60 – 100 g/l | (*) |
| Aluminium concentration | : 100 – 200 g/l | (*) |
| MG 39 | : 50 g/l | |
| Dipping time | : 3 – 30 minutes (depending on the desired finishing) | |
| Temperature | : 45 – 60 °C | |

- (*) For the best stability of the solution, without precipitation of aluminium hydroxide, it is suggested to keep the ratio between free caustic soda and dissolved aluminium between 0.6 and 0.8. If the chemical reaction speed should be too high it is suggested to reduce the dipping time and/or the temperature (even if this is not dangerous for the quality of the finishing).

Tecnologie avanzate per alluminio / *Advanced technologies for aluminium*

HEADQUARTER: Via Marinuzzi, 38 - 41122 Modena (Italy) - Tel. +39 059 280 362 - Fax +39 059 280 462 - E-mail: info@italtecnno.com



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Prodotti chimici, vernici in polvere, attrezzature e macchine. Progettazione e realizzazione impianti.
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- Phenolphthalein 1% in alcohol

METHOD

- Pipette 5 ml of filtered etch bath solution into a titrating flask.
- Dilute with distilled water to 150 ml.
- Add 0.5 ml of phenolphthalein (indicator).
- Titrate with 1N hydrochloric acid until the solution becomes milky white.
- Consumption of titration call "A" ml.
- Add about 2 gr of potassium fluoride powder.
- Titrate with N1 hydrochloric acid until the solution turns and remains colorless.
- Consumption of titration call "B" ml.

CALCULATION

$$\begin{aligned} \text{grams/litre of dissolved aluminium} &= B \times 1.8 \\ \text{grams/litre of free caustic soda} &= (A - B / 3) \times 8 \end{aligned}$$

MG 39

REAGENTS REQUIRED

- KMnO_4 , 1N solution.
- Oxalic acid, 1N solution.
- H_2SO_4 , concentrate.

PROCEDURE:

- Put 50 ml of DI water in a 400 ml beaker.
- Add exactly 5 ml of the bath solution.
- Add exactly, with accuracy, 20 ml of KMnO_4 1N.
- Heat up to boiling point and keep boiling for 10 minutes. The solution in the beaker will turn first to green colour (Mn^{6+}) and then a precipitate will be observed (MnO_2) and finally it will turn to a violet-brown.
- Add exactly, with accuracy, 20 ml of oxalic acid 1 N.
- Add 10 ml of concentrated sulphuric acid (or 20 ml of 50% sulphuric acid). The solution in the beaker will become completely clear and colourless.
- When the solution is still hot, titrate with KMnO_4 1N till a persistent pink-violet colour.
- Record as "A" the ml of KMnO_4 used for the titration.

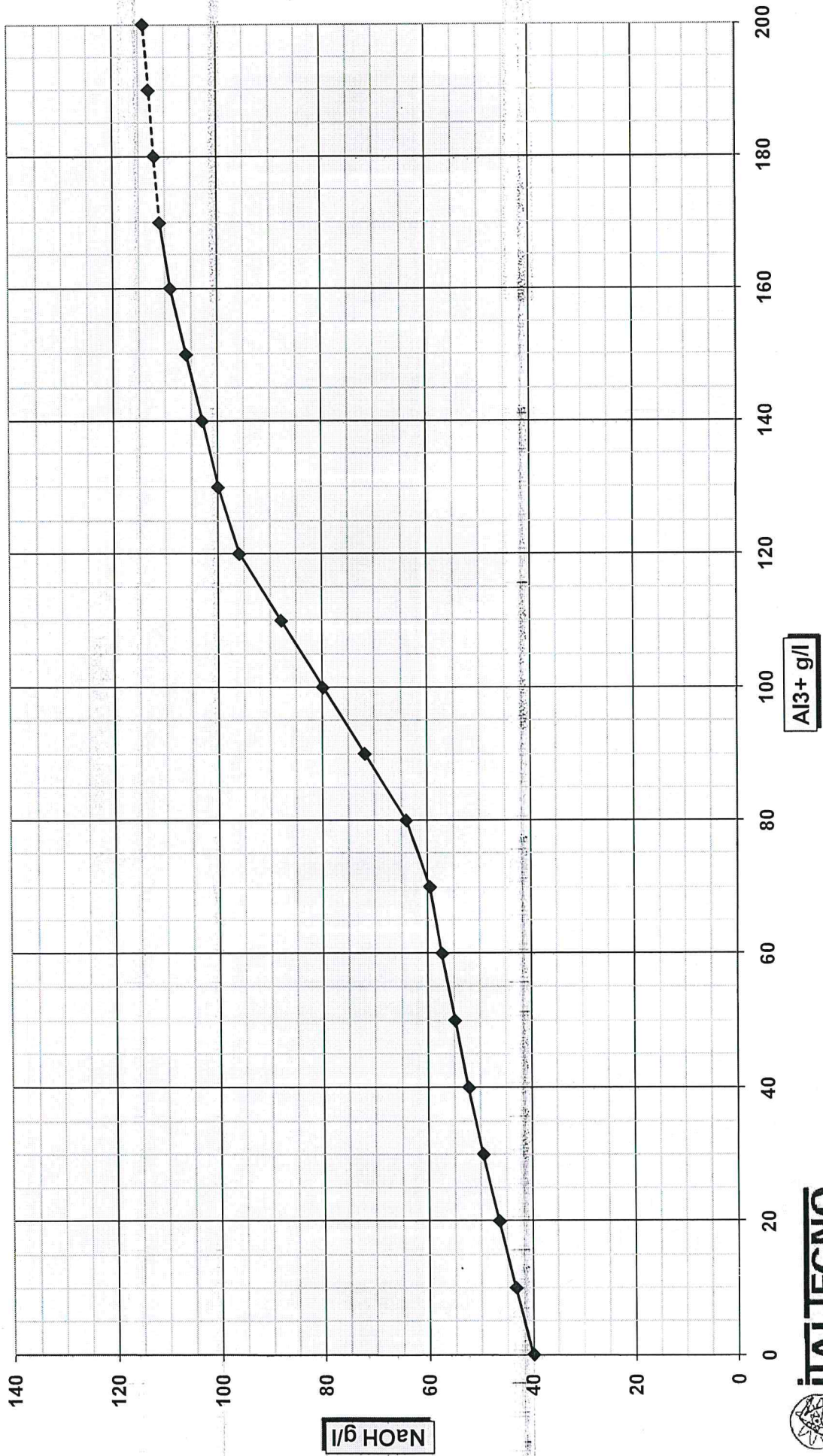
CALCULATIONS:

$$A \times 3.98 = \text{g/l of MG 39}$$

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Optimal ratio between caustic soda and dissolved aluminium in etching baths with MG 39



From: Ashok Kumar Rana
Sent: 23 February 2023 07:39
To: Bhiwadi Purchase; Rajgopal C. Sarda
Cc: Manoj Tiwari
Subject: Re: Enquiry No:EN230203875Bhiwadi Division

To
M/S Jindal Aluminium Ltd
SP-2/333 Industrial Area
Bhiwadi Rajasthan- 301019

Dear Sir

We are quoting the lowest price of our product for enquiry number- EN230203875 as follows:

1. MSP 46 L - Rs.142/- per ltr (in 30 ltr packs)

Terms and conditions

1. GST 18% will be extra.
2. Freight will be extra as applicable.
3. Payment Terms will be the same as before.

Should you require further information or clarification, I would be glad to provide you with the same through my contact information below.

Thanking you and assuring you of our best services at all times.

Yours truly

Ashok Kumar Rana

Sr. Manager

GTZ(India) Pvt. Ltd.

F-106 Floor Phase -2

Maya Pur industrial area

Maya Pur New Delhi 110064

Mob No -9810731706

Email -ranakumar.ashok2006@gmail.com

CC- Manoj Tiwari

On Wed, Feb 22, 2023 at 2:56 PM <purchase.bhiwadi@jindalaluminium.com> wrote:

Dear Sir/Madam,

PLEASE QUOTE YOUR COMPETITIVE OFFER FOR THE ATTACHED ENQUIRY BY RETURN MAIL & KINDLY SEND YOUR ACKNOWLEDGEMENT MAIL ONCE YOU RECEIVED THE ENQUIRY FOR CONFIRMATION.

NOTE : FEEL FREE TO CONTACT US IF YOU ARE NOT GETTING ENQUIRY ATTACHMENT AS MENTIONED IN ITEM DESCRIPTION.

ASST. MANAGER PURCHASE,
JINDAL ALUMINIUM LIMITED,
Bhiwadi division,
SP-2/333, INDUSTRIAL AREA,
BHIWADI - 301019,
ALWAR DIST,(RAJASTHAN)
GST No. 08AAACJ4324M1ZH
PH. NO. 9611195368
Website : www.jindalaluminium.com

135th Final price

After discussion with mr. Ashok Kumar Above price are final.

| CHECK LIST | |
|-------------|-------------------------|
| DISCOUNT | : Above price are final |
| PRICE BASIS | : FOR BHIWADI FOR JAL |
| P & F | : INCL. / EXTRA |
| GST/IGST | : 18% Extra |
| DELIVERY | : 15 DAYS |
| GC/MCTC | : _____ |
| VALIDITY | : 10 DAYS |
| CHECKED BY | : Anish |