



EXCELENCIA EN CALIDAD

Acera Ramos Arizpe
 CARRETERA MONCILOVA KM 4 NUMERO 2125
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CERTIFICADO DE CALIDAD / CERTIFICATE OF TEST AND ANALYSIS

| | |
|-----------------------------------|-------------------|
| No. Certificado / Certificate No. | 187311 - 22932042 |
| Fecha / Date | 11/11/2020 |

Hecho en México / Made in Mexico

| DATOS DEL CLIENTE / SOLD TO | | CLIENTE CONSIGNADO / SHIP TO | |
|--|---------------------------------------|---|--------------------------------|
| Cliente / Customer: PLESA ANAHUAC Y CIAS SA DE CV | | Cliente / Customer: MATRIZ TULTITLAN | |
| Dirección / Address: AV VALLE DE LAS ALAMEDAS 66 0 SAN FRANCISCO CHILPAN | | Dirección / Address: AV VALLE DE LAS ALAMEDAS 66 0 66 SAN FRANCISCO CHILPAN | |
| Ciudad / City: TULTITLAN | Estado / State: EDO. DE MEXICO | Ciudad / City: TULTITLAN | Estado / State: EDO. DE MEXICO |
| Teléfono / Phone: 10838570 | Pais / Country: MEXICO C.P./ZIP 54940 | | |
| Correo Electrónico / eMail: rceballos@pleasa.com.mx | | Datos del Embarque / Shipping Information | |
| | | Núm. Viaje / Travel No.: 187311 | |
| | | Núm. Factura / Invoice No.: FQ113785 | |
| | | Pedido / Customer Order No.: 22932042 | |
| | | Núm. Plan / Shipping Plan: 200954 | |
| | | Fecha Embarque / Date: 11/11/2020 | |

| COMPOSICION QUIMICA / CHEMICAL COMPOSITION (% PESO / WEIGHT) | | | | | | | | | | | | | | | | | | |
|--|----------------------|--------------|--|----------|----------|----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|--------|---------|----------|
| Colada / Heat Sequence | Secuencia / Sequence | Clave / Code | Producto / Description of Goods | % C | % Mn | % Si | % P | % S | % Cu | % Cr | % Ni | % Mo | % Sn | % Ti | % V | PPM Nb | PPM N | CE |
| 46054 | 9443 | 60287 | ANGULO L1 1/2" x 1 1/2" x 3/16" A-36 P 6.10m 2.0T | AVG 0.20 | AVG 0.71 | AVG 0.21 | AVG 0.008 | AVG 0.004 | AVG 0.21 | AVG 0.14 | AVG 0.06 | AVG 0.021 | AVG 0.013 | AVG 0.001 | AVG 0.001 | AVG 14 | AVG 105 | AVG 0.34 |
| 46054 | 9444 | 60287 | ANGULO L1 1/2" x 1 1/2" x 3/16" A-36 P 6.10m 2.0T | 0.20 | 0.71 | 0.21 | 0.008 | 0.004 | 0.21 | 0.14 | 0.06 | 0.021 | 0.013 | 0.001 | 0.001 | 14 | 105 | 0.34 |
| 46055 | 9439 | 60341 | ANGULO L1 1/2" x 1 1/2" x 3/16" A36/529-50 12.20m 4.0T | 0.20 | 0.70 | 0.18 | 0.008 | 0.008 | 0.26 | 0.11 | 0.06 | 0.021 | 0.013 | 0.001 | 0.000 | 14 | 103 | 0.34 |
| 46055 | 9440 | 60341 | ANGULO L1 1/2" x 1 1/2" x 3/16" A36/529-50 12.20m 4.0T | 0.20 | 0.70 | 0.18 | 0.008 | 0.008 | 0.26 | 0.11 | 0.06 | 0.021 | 0.013 | 0.001 | 0.000 | 14 | 103 | 0.34 |
| 45957 | 9368 | 60282 | ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T | 0.21 | 0.74 | 0.21 | 0.006 | 0.006 | 0.19 | 0.07 | 0.06 | 0.027 | 0.008 | 0.001 | 0.001 | 15 | 92 | 0.35 |

| PROPIEDADES MECANICAS / MECHANICAL PROPERTIES | | | | | | | | | | | | | |
|---|----------------------|--------------|--|-----------------------|-------------------|--------|------------|---------------------|---------------|------------|-----------------------|--|--|
| Colada / Heat | Secuencia / Sequence | Clave / Code | Producto / Description of Goods | Calibre / Diameter | Cantidad / Bundle | RT AVG | TS PSI AVG | % Elong / Elong AVG | LF kg/mm² AVG | YS PSI AVG | P. Doblez / Band Test | | |
| 46054 | 9443 | 60287 | ANGULO L1 1/2" x 1 1/2" x 3/16" A-36 P 6.10m 2.0T | 1/2" x 1 1/2" x 3/16" | 3 | 50.1 | 71403.2 | 28.4 | 38.8 | 55260.7 | Cumple / Successfully | | |
| 46054 | 9444 | 60287 | ANGULO L1 1/2" x 1 1/2" x 3/16" A-36 P 6.10m 2.0T | 1/2" x 1 1/2" x 3/16" | 1 | 50.1 | 71403.2 | 28.4 | 38.8 | 55260.7 | Cumple / Successfully | | |
| 46055 | 9439 | 60341 | ANGULO L1 1/2" x 1 1/2" x 3/16" A36/529-50 12.20m 4.0T | 1/2" x 1 1/2" x 3/16" | 1 | 50.1 | 71403.2 | 28.4 | 38.8 | 55260.7 | Cumple / Successfully | | |
| 46055 | 9440 | 60341 | ANGULO L1 1/2" x 1 1/2" x 3/16" A36/529-50 12.20m 4.0T | 1/2" x 1 1/2" x 3/16" | 1 | 50.1 | 71403.2 | 28.4 | 38.8 | 55260.7 | Cumple / Successfully | | |
| 45957 | 9368 | 60282 | ANGULO L1 1" x 1" x 3/16" A-36 P 6.10m 1.1T | 1" x 1" x 3/16" | 4 | 55.0 | 78307.6 | 22.4 | 39.8 | 56756.3 | Cumple / Successfully | | |

OTROS DATOS ADICIONALES / ADDITIONAL INFORMATION
 Acero fundido y colado en: México / Steel melted and poured in Mexico

Certificamos que este material ha sido producido, inspeccionado y probado de acuerdo a las normas de fabricación del acero aplicables a la ASTM A36-2008, A529-2005 (re aprobada el 2009), A572-2012 y A992-2011 y a las normas dimensionales NMX B252, ASTM A6/A6M-2012. / We certify that this material has been produced, inspected and tested according to standards applicable steelmaking to ASTM A36-2008, A529-2005 (Reapproved 2009), A572-2012 y A992-2011, and the dimensional standards NMX B252, ASTM A6/A6M-2012



JUAN ALEJANDRO GALVAN GARCIA
 Gerente de Aseguramiento de Calidad / Quality Assurance Manager

Juan Alejandro Galvan Garcia