INDUSTRIAL LUBRICANT TECHNICAL DOCUMENT

C SERIES

C Series diluible en agua fluido para metalmecánica

OPERATION AND HANDLING INSTRUCTIONS

N.º de documento	Revisión	Fecha de emisión	Release status
MOTTA-C-OHI-ES	REV.05	2026-09-13	Emitido para use

Read Antes del uso: Este documento must be used together con the grado-specific TDS, SDS y fabricante del equipo's instructions. Emitido by MOTTA Lubricants. The current Revisión de Este documento is published at motta-lube.com/documentos/ — if your copy differs, that list governs.

1 Alcance y aplicación

Este documento applies to the Mezcla, filling, concentration y hygiene management, operating monitoring y replacement de MOTTA diluible en agua fluido para metalmecánica (C Series). For use only by trained personnel on equipo whose condition has been confirmed.

MOTTA productos covered by this handbook

Producto	grados	Standards y nivel de desempeños	Formatos de envase
MOTTA C410	ISO 6743-7	ISO 6743-7	18L / 200L
MOTTA C420	ISO 6743-7	ISO 6743-7	18L / 200L
MOTTA C430	ISO 6743-7	ISO 6743-7	18L / 200L
MOTTA C440	ISO 6743-7	ISO 6743-7	18L / 200L
MOTTA C450	ISO 6743-7	ISO 6743-7	18L / 200L
MOTTA C460	ISO 6743-7	ISO 6743-7	18L / 200L

grados, standards y Formatos de envase as published on each producto's Ficha técnica at motta-lube.com/productos/. Where a data sheet y this table differ, the data sheet governs.

2 Pre-Mix Inspección

- Water quality: verify the water source's hardness y pH are within el producto's required range; hard water can affect emulsion stability y skin-contact response.
- Mezcla Método: add the concentrate slowly into water con stirring (Nunca the reverse), y verify the actual concentration con a refractometer - No estimate.
- sistema: the equipo tank, piping y filtration sistema must be limpieza, con no residue from old fluid or contamination from a different producto.
- Personal protección: wear gloves y other PPE per the SDS to minimise direct skin contact.

Precaución: diluible en agua fluidos para metalmecánica de different brands or different chemical types (e.g. full-sintético, semi-sintético, emulsion) must not be mixed directly; thoroughly limpieza the sistema antes de changing type.

Traducción de la versión inglesa. En caso de diferencia, prevalece la versión inglesa.

3 Filling y Initial Mezcla

- Before a new sistema is filled, or antes de changing producto type, thoroughly limpieza the tank, piping y filtration sistema to remove old-fluid residue, sludge y bacterial contamination.
- Mix to the initial concentration el producto requires, verified con a refractometer.
- After Mezcla, verificar that pH is within el producto's recommended range.
- Record the Mezcla date, concentration y water-source information.

4 Routine Concentration y Hygiene Management

- Measure a representative, well-mixed sample using el producto-specific refractometer factor or calibration curve. A Brix reading is not automatically the working concentration. Zero the instrument y follow its temperatura instructions.
- Set top-up concentration from the measured sump concentration, level y loss mechanism. Evaporation y fluid carried out on workpieces No remove concentrate in the same proportion. Add a suitable premixed working fluid or use the supplier-especificado adjustment procedure; mix thoroughly y retest.
- Record concentration y pH at the site monitoring interval, con daily or shift verificars donde appropriate. Remove tramp aceite y investigate abnormal odour, unstable readings or contamination.

5 Bacterial y Contamination Control

- Include microbiological monitoring such as dipslides or an appropriate laboratory Método in the fluid-management plan. Odour y pH alone cannot establish microbial control.
- Remove tramp aceite, swarf y sludge y maintain filtration y circulation. Determine corrective action from the fluid condition y test results.
- Use biocide only when suitable para el producto y permitted para the Aplicación, at the especificado dose y procedure. Persistent contamination may require a controlled drain, limpieza y refill; No repeatedly dose to mask the cause.
- Skin or respiratory complaints require prompt exposure-control review y appropriate occupational-health assessment; changing the fluid alone does not resolve every cause.

6 Replacement Judgement

Nota: the service life de a diluible en agua fluido para metalmecánica is heavily influenced by concentration management, hygiene control y contamination level; a single fixed-interval replacement commitment is not adopted.

Observation	Continue in Service (Reinforce Management)	Requires Attention	Should Be Replaced
Odour	No clear odour	Slight odour	Persistent, strongly sour/putrid odour
pH	Within the normal range	Slight decline	Persistent significant decline, unresponsive to biocide treatment
Apariencia	Uniform, no stratification	Slight scum	Clear aceite separation, stratification or heavy scum
Skin-reaction reports	No abnormal reports	Isolated mild reaction	Multiple reports de skin irritation or allergic reaction

Stop the affected exposure, investigate fluid condition y work practices, y obtain appropriate occupational-health advice. limpieza or replace contaminated fluid as indicated by the investigation.

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7 Replacement y sistema limpiezaing

- Before replacement, drain the old fluid y limpieza the tank, piping y filtration sistema, removing sludge y biofilm residue.
- Before changing to a different chemical type, confirm thorough limpiezaing to Evite emulsion instability from chemical incompatibilidad between old y new producto.
- After reMezcla, follow the procedure in Section 3.

8 Abnormal-Condition Manejo

Situation	Primary Action
Persistent odour / bacterial growth	Increase tramp-aceite skimming y limpiezaing; consider biocide treatment; replace if necessary
Skin-irritation reports	Check concentration y pH immediately; stop use y replace if necessary, y review personal-protección measures
Emulsion stratification / aceite separation	Check mix concentration, water quality y contamination level; assess whether replacement is needed
Workpiece corrosion	Check whether concentration is too low y verify rust-protección performance

9 Valores de referencia — indicativos, no una especificación de MOTTA

The figures below are published industry references, given so that a reading can be judged on site when the máquina documentación is not to hand. They are screening prompts, not scrap limits. Where the fabricante del equipo, the component manufacturer or your aceite analysis laboratory states a figure, that figure governs y this table does not apply.

Working concentration y control Valores

What is measured	Usual working range	How it is measured
Concentration	Set by el producto y the operation — read it, No estimate it	Hand refractometer, using el producto's own refractometer factor
pH	Typically 8.5 – 9.5 para diluible en agua fluids	Meter or strip; a fall towards 8 usually precedes microbial problems

Top up con pre-mixed emulsion at the working concentration, Nunca con water alone. Adding water alone lowers concentration y pH together, which is how a well-running sump turns.

When a reading is worth investigating

What is measured	Prompt to investigate	Why this figure
Odour at start-up	A sour smell on Monday morning	The classic first sign de microbial growth over a weekend standstill
Tramp aceite on the surface	A visible layer	Tramp aceite starves the sump de oxygen y shelters bacteria; skim antes de treating
Concentration drift	Away from the set point in either direction	Rising concentration means water loss; falling means water-only top-up or drag-out

A single result is a reason to look, not a reason to drain. Establish the new-aceite reference para el producto actually in use, trend against it, y find the cause antes de changing the aceite — changing the aceite does not remove a contamination source or a mechanical fault.

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10 Almacenamiento y Eliminación

- Keep the concentrate in the original sealed container, stored in a cool, dry, ventilated area, protected from freezing (some productos' emulsification performance may be affected at baja temperatura - verify el producto requisito).
- Fluido usado (emulsion) normally requires aceite/water separation or professional treatment per local regulations; it must not be discharged directly y must be handed to a compliant Eliminación organisation.
- aceite-contaminated residuos (filter elements, skimmed aceite) must be collected separately y disposed de per local regulations.

Use y documento information

Use this guide con the current producto TDS, SDS y equipo instructions. Resolve conflicting requisitos con the equipo y lubricante technical contacts antes de proceeding. Follow site energy-isolation, spill-response y residuos-Manejo procedures. producto-specific limits y equipo requisitos govern selection y intervalo de servicios.

Revisión 02: Clarified refractometer correction, top-up y microbiological monitoring. Revisión 03: added a reference-Valores section — published industry figures para on-site screening. Revisión 04: corrected the reference Valores para slideways, spindles, sintético aceites de engranajes y ready-to-use refrigerante; added the table de MOTTA productos covered; added the copyright y trademark notice. Revisión 05: removed a leftover review-copy notice that contradicted the Emitido status. No technical content changed.

Recommended Records to Retain

Record Category	Minimum Recommended Content
equipo	equipo number, sump capacity, location
Producto	Full producto name, chemical type, lote number
Mezcla	Mix date, concentration, water source, pH
Routine monitoring	Concentration, pH, odour, appearance-verificar record
Maintenance	Tramp-aceite skimming, biocide treatment, limpiezaing/replacement events
Salud	Skin-reaction reports y actions taken

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