

STARCHEM

StarClean 505

Machine and General-Purpose Cleaner Concentrate

GENERAL DESCRIPTION

StarClean 505 is a concentrated cleaner designed to quickly remove oily residues, dirt deposits, and insoluble soap scums from individual machine sumps and central systems, metalworking fluid supply lines and equipment. This highly effective formula will also facilitate the removal of biofilms by eliminating the deposits that provide safe-haven for bacteria and mold. **StarClean 505** contains corrosion inhibitors to protect cast iron and steel machine components and parts during cleaning. When used as recommended, **StarClean 505** will not degrade paints, seals, hoses or other elastomeric materials commonly used in metalworking fluid systems. **StarClean 505** can also be used in power washers and automated scrubbers as a general purpose floor cleaner.

StarClean 505 is not recommended for use on magnesium or alloyed magnesium.

ADVANTAGES

- Fast-acting to minimize machine-cleaning downtime
- Removes biofilms in lines and other difficult-to-reach or hidden areas
- Excellent in-process corrosion protection for cast iron and steel
- Compatible with synthetic, semisynthetic and soluble oil metalworking fluids
- Will not degrade paints, or elastomeric components when used as recommended

StarClean 505 does not contain phosphates, nitrite, phenolic biocides, or butyl cellosolve.

APPLICATION

StarClean 505 is alkaline. Safety goggles and impervious gloves must be worn when handling concentrated product or mix. Avoid contact of the concentrated product or mix with the eyes or skin.

In case of eye contact with the concentrated product or mix, flush immediately with running water for 15 minutes. Get prompt medical attention.

In case of skin contact with concentrated product or mix, wash with water as soon as possible.

StarClean 505 can be used effectively employing any one of the following three methods:

As a cleaner:

Remove used metalworking fluid, chips, swarf, and residue from the machine, tank, and lines. Fill the individual sump or central system with sufficient water to run all pumps and lines. Add **StarClean 505** at 2% (2 gals. of cleaner to 100 gals. of water) and circulate for 2 to 4 hours through all machines and lines. Remove the cleaner solution, and rinse with a fresh, 2% mix of the desired metalworking fluid. (Note: Rinsing with tap water alone can produce flash rust.) Circulate through all lines while flushing down any machine tool surfaces. Remove the mix, and recharge the individual sump or central system with the appropriate metalworking fluid.

Added to the metalworking fluid during shutdown:

Add **StarClean 505** at 2% to the existing metalworking fluid. Circulate through all machines and lines for at least 4 hours. Remove the cleaner/metalworking fluid mixture and rinse with a fresh, 2% mix of the desired metalworking fluid. (Note: Rinsing with tap water alone can produce flash rust.) Circulate through all lines while flushing down any machine tool surfaces. Remove the mix, and recharge the individual sump or central system with the appropriate metalworking fluid.

Added to the metalworking fluid during production:

During production, add **StarClean 505** at 1% (1 gals. of cleaner to 100 gals. of metalworking fluid mix) and circulate through all machines and lines for at least 8 hours. Remove the cleaner/metalworking fluid mixture and rinse with a fresh, 2% mix of the desired metalworking fluid. (Note: Rinsing with tap water alone can produce flash rust.) Circulate through all lines while flushing down any machine tool surfaces. Remove the mix, and recharge the individual sump or central system with the appropriate metalworking fluid.

Note: High pressure or high flow systems can foam when using **StarClean 505**. **Starchem Antifoam 1** can be used at 0.1% (1:1,000) to eliminate or control the foam.

PHYSICAL PROPERTIES

Form	Clear Liquid	Specific Gravity (H₂O=1)	1.08
Boiling Point	212°F	pH (concentrate)	11.0
Flash Point (COC)	NA	Typical Operating pH Range	10.2 – 10.6
Solubility in Water	100% Miscible	Refractometer Factor	4.0

AVAILABILITY

StarClean 505 is available in 5-gallon pails, 55-gallon drums, and in bulk.

MIXING INSTRUCTIONS

Always add **StarClean 505** concentrate to water. Cleaner concentration can be determined using a refractometer.

StarClean 505 CONCENTRATION

Concentration	1% (1:100)	2% (1:50)	3% (1:33)	4% (1:25)	5% (1:20)
Refractometer Reading	0.3	0.5	0.8	1.0	1.3

HEALTH & SAFETY

The most recent MSDS is available from either **STARCHEM** or your authorized **STARCHEM** Distributor.

NOTES

- For **INDUSTRIAL USE ONLY**. Consult **STARCHEM** before using this product on any metals or applications not specifically recommended.
- Do not use any metalworking fluid additives except as recommended by **STARCHEM**.
- The general description, recommended uses, application data and statements in the product literature are guidelines. Because this product may be used for a variety of applications over which the manufacturer has no control, the manufacturer assumes no liability for incidental, consequential, or direct damages of any kind, regardless of causes, including negligence.

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