# TRIM<sup>®</sup> HD

## Synthetic Stamping Fluid

TRIM HD is a synthetic stamping fluid for light-tomoderate duty stamping, drawing, and forming and can also be used for general machining and grinding of ferrous materials. It utilizes a proprietary blend of heavyduty boundary and extreme pressure lubricity agents for improved performance on stainless steel, super alloy, and most soft aluminum.

Peak your performance:

TRIM<sup>®</sup> clean-running synthetics

contain little to no oil. They are

good corrosion protection. Plus,

less maintenance and lower

Run clean and long with TRIM

and money.

synthetics.

typically hard-water tolerant with

synthetics leave very low residue for

easy cleaning. Paired with extremely

low carryoff, synthetics translate to

operational costs, saving you time

## **Synthetics**



### Aerospace Approvals

Company	Specification
General Dynamics	No specification available





#### Choose HD:

- Lubrication package protects machines and extends the life of the die
- Provides rapid and effective cooling and reduces machining forces through the use of EP additives and boundary lubricants
- Has superior anti-weld action to control built-up edge and chip welding
- Compatible with all ferrous and most nonferrous materials
- Broad range of applications by using different concentrations for different applications
- Fully compatible with most nonmetallic materials
- A superior product for low-speed, highpressure operations such as production band sawing and drilling
- Will keep your machines clean while leaving a soft, fluid film that protects the bare metal parts of your machine tools

#### HD especially for:

**Applications** — band sawing, drilling, grinding, high-pressure, machining, and stamping

**Metals** — aluminum, ferrous metals, most nonferrous metals, nonmetallic materials, stainless steels, and super alloys

Industries — aerospace and automotive HD is free of — oil



# TRIM<sup>®</sup> HD

## Synthetic Stamping Fluid

## **Application Guidelines**

- Typical concentration range is 10.0% 20.0% or can be used neat for more severe stamping, blanking, or punching operations.
- HD is not recommended for use on reactive metals (i.e., magnesium or zirconium).
- For additional product application information, including performance optimization, please contact your Master Fluid Solutions' Authorized Distributor at <u>https://www.masterfluids.com/na/en-us/distributors/index.php</u>, your District Sales Manager, or call our Tech Line at 1-800-537-3365.

## **Physical Properties Typical Data**

Color (Concentrate)	Cream
Color (Working Solution)	Opaque
Odor (Concentrate)	Mild pine
Form (Concentrate)	Liquid
Flash Point (Concentrate) (ASTM D92-90)	> 208°F
pH (Concentrate as Range)	8.4 - 9.0
pH (Typical Operating as Range)	8.3 - 8.9
Coolant Refractometer Factor	2.7
Titration Factor (CGF-1 Titration Kit)	0.68
Digital Titration Factor	0.0196
V.O.C. Content (ASTM E1868-10)	73 g/l

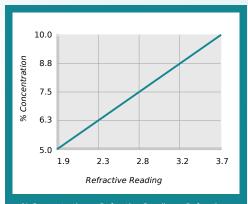
### **Recommended Metalworking Concentrations**

Light Duty
Moderate Duty
Heavy Duty
Design Concentration Range

5.0% - 6.5% 6.5% - 8.5% 8.5% - 10.0% 5.0% - 10.0%

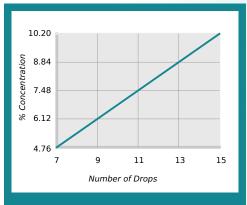


#### **Concentration by % Brix**



% Concentration = Refractive Reading x Refractive Factor Coolant Refractometer Factor % Brix = 2.7

#### **Concentration by Titration**



% Concentration = No. of Drops x Titration Factor Titration Factor = 0.68

#### **Health and Safety**

Request SDS





# TRIM<sup>®</sup> HD

## Synthetic Stamping Fluid

## **Mixing Instructions**

- Recommended usage concentration in water: 5.0% 10.0%.
- To help ensure the best possible working solution, add the required amount of concentrate to the required amount of water (never the reverse) and stir until uniformly mixed.
- Use premixed coolant as makeup to improve coolant performance and reduce coolant purchases. The makeup you select should balance the water evaporation rate with the coolant carryout rate. Use our Coolant Makeup Calculator to find the best ratio for your machine: <u>apps.masterfluids.com/makeup/</u>.
- Use mineral-free water to improve sump life and corrosion inhibition while reducing carryoff and concentrate usage.



 $\mathsf{TRIM}^{\circledast}\:\mathsf{HD}$  |  $\:$  ©1967-2024 Master Fluid Solutions  $^{\circledast}$  | 2024-04-26



#### **Additional Information**

- Use Master STAGES<sup>™</sup> Whamex XT<sup>™</sup> for a quick and thorough precleaning of your machine tool and coolant system.
- Consult Master Fluid Solutions before using on any metals or applications not specifically recommended.
- This product should not be mixed with other metalworking fluids or metalworking fluid additives, except as recommended by Master Fluid Solutions, as this may reduce overall performance, result in adverse health effects, or damage the machine tool and parts. If contamination occurs, please contact Master Fluid Solutions for recommended action.
- TRIM<sup>®</sup> is a registered trademark of Master Chemical Corporation d/b/a Master Fluid Solutions.
- Master STAGES<sup>™</sup> and Whamex XT<sup>™</sup> are trademarks of Master Chemical Corporation d/b/a Master Fluid Solutions.
- The information herein is given in good faith and believed current as of the date of publication and should apply to the current formula version. Because conditions of use are beyond our control, no guarantee, representation, or warranty expressed or implied is made. Consult Master Fluid Solutions for further information. For the most recent version of this document, please go to this URL:

https://2trim.us/di/?i=na\_en-us\_HD



501 West Boundary Street Perrysburg, OH 43551-1200 United States +1 419-874-7902

info@masterfluids.com

masterfluids.com/na/en-us/

