

**MATERIAL SAFETY DATA SHEET  
CLEAN 2029 "ONE STEP"**

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Product name** CLEAN 2029 "One Step"  
**Material type** Parts Washing Fluid with Corrosion Inhibitor  
**Classification/synonym(s)** None/None  
**Product use** Removal of metalworking fluids from machine tools and parts  
**Manufacturer address** MASTER CHEMICAL CORPORATION  
501 West Boundary  
Perrysburg, OH 43551-1200  
419-874-7902  
**Emergency telephone** 800-424-9300

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>COMPONENT</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>OTHER LIMITS RECOM.</b>	<b>CAS #</b>	<b>%RANGE</b>
Triethanolamine	none	5mg/m <sup>3</sup>	none	102-71-6	1-5

The exact chemical identities and percentages of the raw materials used in CLEAN 2029 "One Step" are trade secrets. This information is being withheld as provided for in the Occupational Safety and Health Administration's Hazard Communication Rule (29 CFR 1910.1200).

**3. HAZARDS IDENTIFICATION**

**Emergency overview** Yellow liquid  
No immediate hazard  
Thermal decomposition (fire) may produce oxides of carbon and nitrogen

**POTENTIAL HEALTH EFFECTS**

<b>Acute effects of overexposure</b>	Eye contact	May cause irritation
	Skin contact	Nonirritant
	Skin absorption	Nontoxic
	Ingestion	Nontoxic

**Chronic effects of  
overexposure** None currently known

**Product/Ingredients listed as  
carcinogen or potential carcinogen?** NTP Annual Report No IARC Monographs No  
OSHA No

**Signs and symptoms of exposure** None

**Medical conditions generally  
aggravated by exposure** None known

#### 4. FIRST AID MEASURES

<b>Emergency and first aid procedures</b>	Eyes	Flush immediately with cool, clean water for at least 15 minutes
	Skin	Wash with mild soap and warm water
	Inhalation	Move to fresh air
	Ingestion	If large quantities are ingested, contact a physician

In every case get medical attention as required

#### 5. FIRE FIGHTING MEASURES

**Flash point (test method)** 212°F (100°C) COC **Flammable limits** Not determined

**Extinguishing media** As appropriate for the surrounding fire: water (flood with water), dry chemical, CO<sub>2</sub>, or "alcohol" foam

**Special fire fighting procedures** None **Unusual fire and explosion hazards** None

#### 6. ACCIDENTAL RELEASE MEASURES

**Steps to be taken if material is released or spilled** Mop up or use dry absorbent

#### 7. HANDLING AND STORAGE

**Precautions to be taken in handling and storing** Avoid contact with eyes. Avoid prolonged or repeated skin contact with the concentrate. Wash thoroughly after handling. Do not swallow. Refer to container labels.

**Other precautions** This product contains amines. Do not add nitrite or other nitrosating agents to this product due to the potential for nitrosamine formation.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Respiratory protection (Specify type)** None

**Ventilation**

Local exhaust	Not normally required
Mechanical (General)	General room ventilation should be sufficient
Special	None
Other	None

**Protective gloves** None

**Other protective equipment** Not normally required

**Eye protection** Safety glasses

**Exposure limits** None established by ACGIH or OSHA for product as whole  
Refer to Section 2

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow liquid
Odor	Mild
pH of concentrate (as range)	11.3 - 11.7
Typical Operating pH (as range)	10.0 - 11.5
Boiling point (ASTM D86)	209°F (98°C)
Freezing point	24°F (-4°C)
Solubility in water	Soluble
Specific gravity (H <sub>2</sub> O=1)	1.078
V.O.C. Content (EPA Method 24)	0 lb/gal
Evaporation rate (butyl acetate=1)	0.061

## 10. STABILITY AND REACTIVITY

Stability	Stable	Conditions to avoid	None
Incompatibility (materials to avoid)	Strong acids and oxidizers		
Hazardous combustion or decomposition products	Thermal decomposition (fire) may produce oxides of carbon and nitrogen		
Hazardous polymerization	Will not occur	Conditions to avoid	None

## 11. TOXICOLOGICAL INFORMATION

Study	Test Animal	Concentrate	Results	5% Solution
Acute inhalation toxicity	Rat	---		nontoxic LC <sub>50</sub> >200mg/l
Acute oral toxicity	Rat	nontoxic LD <sub>50</sub> >5000mg/kg		nontoxic
Acute dermal toxicity	Rabbit	nontoxic LD <sub>50</sub> >2000mg/kg		nontoxic
Primary skin irritation	Rabbit	nonirritant PII index=0.50		nonirritant PII index=0.00
Primary eye irritation	Rabbit	irritant		nonirritant

## 12. ECOLOGICAL INFORMATION

No data available

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal method** Must comply with local, state, and federal regulations. If pre-treatment is needed, chemical treatment or ultrafiltration may be used. Contact Master Chemical Tech Line (1-800-537-3365) for assistance.

#### 14. TRANSPORT INFORMATION

**Department of Transportation**                      **DOT Hazard Class:** None  
CLEAN 2029 "One Step" is not classified as a hazardous material by DOT

#### 15. REGULATORY INFORMATION

**Resource Conservation and Recovery Act**                      **EPA Hazardous Waste Number(s):** None  
CLEAN 2029 "One Step" is not classified as a hazardous waste by EPA.

**Toxic Substances Control Act**                      All CLEAN 2029 "One Step" ingredients are listed on the TSCA Inventory of Chemical Substances.

**Superfund Amendments and Reauthorization Act of 1986**                      CLEAN 2029 "One Step" does not contain any Section 302/304 Extremely Hazardous Substances or Section 313 Toxic Chemicals.

#### 16. OTHER INFORMATION

	<b>HMIS Hazard Index</b>	<b>Concentrate</b>	<b>NFPA Rating</b>
(Health)	H = 1		H = 1
(Fire)	F = 0		F = 0
(Reactivity)	R = 0		R = 0
(Personal Protection)	PP = A (safety glasses)		Special hazards = none
	<b>Typical Working Solution</b>		
	H = 1		H = 1
	F = 0		F = 0
	R = 0		R = 0
	PP = A (safety glasses)		Special hazards = none

**Key** 0 = minimal    1 = slight    2 = moderate    3 = serious    4 = severe  
This information is intended solely for the use of individuals trained in the particular system.

(C) 1998 – 2012 Master Chemical Corporation.

The information herein is given in good faith and believed current as of the date of this MSDS. Because conditions of use are beyond our control, no guarantee, representation or warranty expressed or implied is made. Consult Master Chemical Corporation for further information.

**Date of preparation**                      October 29, 2012