



SAFETY DATA SHEET

1. Identification

Product name Master STAGES™ Whamex™
Other means of identification None.
Recommended use Metal cleaners
Recommended restrictions Applicable for industrial settings only. No other uses are advised.
Manufacturer
Company Name Master Fluid Solutions
Address 501 West Boundary
Perrysburg, Ohio 43551-1200
United States
Telephone 419-874-7902
Website www.masterfluidsolutions.com
E-mail info@masterfluids.com
Emergency phone number CHEMTREC 1-800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.
Health hazards Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Environmental hazards Not classified.
OSHA defined hazards Not classified.
Label elements



Signal word Warning
Hazard statement Causes skin irritation. Causes serious eye irritation.
Precautionary statement
Prevention Wash hands thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.
Response If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
Storage Store away from incompatible materials.
Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC) None known.
Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
TRADE SECRET		Proprietary	10 - < 20
GLYCOL ETHER		34590-94-8	5 - < 10
TRADE SECRET		Proprietary	3 - < 5
TRIETHANOLAMINE		102-71-6	3 - < 5

Chemical name	Common name and synonyms	CAS number	%
Monoethanolamine		141-43-5	1 - < 3
TRADE SECRET		Proprietary	1 - < 3
Other components below reportable levels			60 - < 70

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Move to fresh air.
Skin contact	Wash affected area with mild soap and water.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses.
Ingestion	In the unlikely event of swallowing contact a physician or poison control center.
Most important symptoms/effects, acute and delayed	None known.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically.
General information	Get medical attention, if needed.

5. Fire-fighting measures

Suitable extinguishing media	Dry chemical, CO2, water spray or alcohol resistant foam. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical	No unusual fire or explosion hazards noted.
Special protective equipment and precautions for firefighters	Wear suitable protective equipment. Use standard firefighting procedures and consider the hazards of other involved materials.
Fire fighting equipment/instructions	Containers should be cooled with water to prevent vapor pressure build up.
General fire hazards	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. Use personal protective equipment as required.
Methods and materials for containment and cleaning up	Soak up with inert absorbent material. Clean up in accordance with all applicable regulations.
Environmental precautions	Not available.

7. Handling and storage

Precautions for safe handling	Do not taste or swallow. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.
Conditions for safe storage, including any incompatibilities	Store in a closed container. The product is stable and non-reactive under normal conditions of use, storage and transport. Store in a dry place.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Permissible Exposure Limits (PEL) for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Glycol Ether (CAS 34590-94-8)	PEL	600 mg/m3
		100 ppm
Monoethanolamine (CAS 141-43-5)	PEL	6 mg/m3
		3 ppm

US. ACGIH Threshold Limit Values (TLV)

Components	Type	Value
Glycol Ether (CAS 34590-94-8)	STEL	150 ppm
	TWA	50 ppm
Monoethanolamine (CAS 141-43-5)	STEL	6 ppm
	TWA	3 ppm
Triethanolamine (CAS 102-71-6)	TWA	5 mg/m3

NIOSH. Immediately Dangerous to Life or Health (IDLH) Values, as amended

Components	Type	Value
Glycol Ether (CAS 34590-94-8)	IDLH	1.1 %
		600 ppm

US. NIOSH: Pocket Guide to Chemical Hazards Recommended Exposure Limits (REL)

Components	Type	Value
Glycol Ether (CAS 34590-94-8)	STEL	900 mg/m3
		150 ppm
	TWA	600 mg/m3
		100 ppm
Monoethanolamine (CAS 141-43-5)	STEL	15 mg/m3
		6 ppm
	TWA	8 mg/m3
		3 ppm

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Eye wash fountain and emergency showers are recommended.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Safety glasses.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Physical state	Liquid.
Color	Yellow
Odor	Mild
Odor threshold	Not available.
pH	> 10.5 - < 11
Melting point/freezing point	5 °F (-15 °C)
Initial boiling point and boiling range	Not available.
Flash point	>215.6 °F (>102.0 °C)
Evaporation rate	<1 BuAc

Flammability (solid, gas)	Not applicable
Upper/lower flammability or explosive limits	
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Flash point class	ASTM D93-08
pH in aqueous solution	> 10 - < 10.6
Specific gravity	> 1.026 - < 1.134

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Incompatible materials	Powerful oxidizers. Acids.
Hazardous decomposition products	To avoid thermal decomposition, do not overheat.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	May be irritating to the skin.
Eye contact	May be irritating to eyes.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics	May be irritating to the skin. May be irritating to eyes.
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Information on toxicological effects

Acute toxicity	Not classified.
Skin corrosion/irritation	May be irritating to the skin.
Serious eye damage/eye irritation	May be irritating to eyes.
Respiratory or skin sensitization	
Respiratory sensitization	Not classified.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)	
Not listed.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not classified.

Chronic effects None known.

12. Ecological information

Ecotoxicity Not available.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Follow precautions for safe handling described in this safety data sheet.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

US state regulations**California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 06-03-2015

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Version # 06

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