STAGES .

SAFETY DATA SHEET

1. Identification

Product identifier 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/Importer/Supplier/Distributor information

Manufacturer

Company Name Master Chemical Corp d/b/a Master Fluid Solutions

Address 501 West Boundary Street

Perrysburg, Ohio 43551-1200

United States

Telephone 419-874-7902

Website www.masterfluidsolutions.com
E-mail info@masterchemical.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
TRADE SECRET*		Proprietary*	5 - < 10
TRADE SECRET*		Proprietary*	3 - < 5

Material name: Master STAGES™ Whamex™

Chemical name	Common name and synonyms	CAS number	%
TRIETHANOLAMINE		102-71-6	3 - < 5
MONOETHANOLAMINE		141-43-5	1 - < 3
TRADE SECRET*		Proprietary*	1 - < 3
TRADE SECRET*		Proprietary*	1 - < 3
Other components below repor	table 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 None known.

symptoms/effects, acute and

delayed

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

Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8 of the SDS. Keep unnecessary personnel away. Use personal protective equipment as required.

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.

7. Handling and storage

Precautions for safe handling Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after

handling. Do not taste or swallow.

Conditions for safe storage, including any incompatibilities

The product is stable and non-reactive under normal conditions of use, storage and transport. Store in a dry place. Store in a closed container.

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8. Exposure controls/personal protection

Occupational exposure limits

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

Components	Туре	Value
MONOETHANOLAMINE (CAS 141-43-5)	PEL	6 mg/m3
		3 ppm
TRADE SECRET	PEL	600 mg/m3
		100 ppm
US. ACGIH Threshold Limit Values		
US. ACGIH Threshold Limit Values Components	Туре	Value
	Type STEL	Value 6 ppm
Components MONOETHANOLAMINE		
Components MONOETHANOLAMINE	STEL	6 ppm

US. ACGIH Threshold Limit Value Components	s Type	Value	
TRIETHANOLAMINE (CAS 102-71-6)	TWA	5 mg/m3	
US. NIOSH: Pocket Guide to Cher	nical Hazards		
Components	Туре	Value	
MONOETHANOLAMINE (CAS 141-43-5)	STEL	15 mg/m3	
		6 ppm	
	TWA	8 mg/m3	
		3 ppm	
TRADE SECRET	STEL	900 mg/m3	
		150 ppm	
	TWA	600 mg/m3	
		100 ppm	

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.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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

pH

10.5 - 11

Melting point/freezing point

5 °F (-15 °C)

Initial boiling point and boiling

Not available.

range

Flash point > 215.6 °F (> 102.0 °C)

Evaporation rate < 1 BuAc
Flammability (solid, gas) Not applicable.
Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not available.

Not available.

Flammability limit - upper

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 Not available.

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available. Not available. **Viscosity**

Other information

ASTM D93-08 Flash point class pH in aqueous solution 10 - 10.6 1.026 - 1.134 Specific gravity

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.

Information on toxicological effects

Acute toxicity Not classified.

May be irritating to the skin. Skin corrosion/irritation May be irritating to eyes. Serious eye damage/eye

irritation

Respiratory or skin sensitization

Respiratory sensitization Classification not possible. Not a respiratory sensitizer. 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 1910.1001-1050)

Not regulated.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Classification not possible.

Specific target organ toxicity -

repeated exposure

Classification not possible.

Aspiration hazard Classification not possible. Not an aspiration hazard.

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.

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13. Disposal considerations

Disposal instructionsDispose of contents/container in accordance with local/regional/national/international 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

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

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

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-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 **Revision date** 07-05-2018

Version # 03

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Master Chemical Corp d/b/a Master Fluid Solutions cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.

Revision information

Identification: Recommended restrictions

Composition / Information on Ingredients: Ingredients

Exposure controls/personal protection: Appropriate engineering controls

Exposure controls/personal protection: Hand protection Exposure controls/personal protection: Respiratory protection

Toxicological Information: Toxicological Data

Transport Information: Material Transportation Information

HazReg Data: North America

GHS: Classification

SDS US

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