Printing date 03/04/2015 Reviewed on 03/12/2014

1 Identification

· Product identifier

· Trade name: Masking Agent

1:1:2 Masking Agent

· Article number: 261-55-01

· Details of the supplier of the safety data sheet

· Manufacturer/Supplier: OFI Testing Equipment Inc. 11302 Steeplecrest Dr. Houston, TX 77065 (877) 837-8683

· Information department:

techservices@ofite.com

Technical Coordinator

Sherman Nelson sherman@aquasolutions.org

· Emergency telephone number:

Chemtrec: 800-424-9300 Canutec: 613-996-6666

2 Hazard(s) identification

· Classification of the substance or mixture



GHS08 Health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS05

GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

 $Tetraethylene pentamine,\ Technical\ Grade$

· Hazard statements

Causes severe skin burns and eye damage.

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May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dusts or mists.

Wear respiratory protection.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a poison center/doctor.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Store locked up.

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

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2Fire = 1Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Fire = 1

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous com	Dangerous components:	
CAS: 102-71-6	Triethanolamine 99%	18.45%
CAS: 112-57-2	Tetraethylenepentamine, Technical Grade	16.087%

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(Contd. of page 2)

· Table of Nonhazardous Ingredients

CAS: 7732-18-5 Water

65.463%

4 First-aid measures

- · Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

102-71-6 Triethanolamine 99%

TLV Long-term value: 5 mg/m³

112-57-2 Tetraethylenepentamine, Technical Grade

WEEL Long-term value: 5 mg/m³

Skin; DSEN

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· Eye protection:



Tightly sealed goggles

Color: Odor: Odor: Odour threshold: pH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Liquid Light yellow Ammonia-like Not determined. Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F) Not determined.
Appearance: Form: Color: Odor: Odour threshold: PH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Light yellow Ammonia-like Not determined. Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Form: Color: Odor: Odour threshold: PH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Light yellow Ammonia-like Not determined. Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Color: Odor: Odour threshold: pH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Light yellow Ammonia-like Not determined. Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Odor: Odour threshold: pH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Ammonia-like Not determined. Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
PH-value: Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature:	Not determined. Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Change in condition Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature: Decomposition temperature:	Undetermined. 100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Melting point/Melting range: Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature: Decomposition temperature:	100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Boiling point/Boiling range: Flash point: Flammability (solid, gaseous): Ignition temperature: Decomposition temperature:	100 °C (212 °F) 163 °C (325 °F) Not applicable. 305 °C (581 °F)
Flash point: Flammability (solid, gaseous): Ignition temperature: Decomposition temperature:	163 °C (325 °F) Not applicable. 305 °C (581 °F)
Flammability (solid, gaseous): Ignition temperature: Decomposition temperature:	Not applicable. 305 °C (581 °F)
Ignition temperature: Decomposition temperature:	305 °C (581 °F)
Decomposition temperature:	
	Not determined.
Auto ionitino	
Thuo igning.	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
	Not determined.
Upper:	Not determined.
<i>Vapor pressure at 20 °C (68 °F):</i>	23 hPa (17 mm Hg)
Density at 20 °C (68 °F):	1.0248 g/cm³ (8.552 lbs/gal)
	Not determined.
1 2	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
-5	Not determined.
Kinematic:	Not determined.
Solvent content:	
0.8	18.5 % 65.5 %

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VOC content: 18.5 %

189.1 g/l / 1.58 lb/gl

· Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

· LD/LC50 values that are relevant for classification:				
ATE (A	ATE (Acute Toxicity Estimates)			
Oral	LD50	24803 mg/kg (rat)		
Dermal	LD50	6838 mg/kg		

112-57-2 Tetraethylenepentamine, Technical Grade

 Oral
 LD50
 3990 mg/kg (rat)

 Dermal
 LD50
 1100 mg/kg (ATE)

- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye: Strong caustic effect.
- $\cdot \textit{Sensitization: Sensitization possible through skin contact.}$
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)	
102-71-6 Triethanolamine 99%	

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

USA

3

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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Water hazard class 2 (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

UN-Number DOT, ADN, IMDG, IATA	Not regulated
UN proper shipping name DOT, ADN, IMDG, IATA	Not regulated
Transport hazard class(es)	
DOT, ADN, IMDG, IATA Class	Not regulated
Packing group DOT, IMDG, IATA	Not regulated
Environmental hazards: Marine pollutant:	No
Special precautions for user	Not applicable.

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(Contd. of page 7)

· UN "Model Regulation":

Not regulated

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

102-71-6 Triethanolamine 99%

112-57-2 Tetraethylenepentamine, Technical Grade

- · Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Carcinogenic categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms





GHS05 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

Tetraethylenepentamine, Technical Grade

· Hazard statements

Causes severe skin burns and eye damage.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

(Contd. on page 9)

Printing date 03/04/2015 Reviewed on 03/12/2014

Trade name: Masking Agent 1:1:2 Masking Agent

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· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Do not breathe dusts or mists.

Wear respiratory protection.

Wear protective gloves.

Wear eye protection / face protection.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a poison center/doctor.

Specific treatment (see on this label).

If experiencing respiratory symptoms: Call a poison center/doctor.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Wash contaminated clothing before reuse.

If skin irritation or rash occurs: Get medical advice/attention.

If swallowed: Rinse mouth. Do NOT induce vomiting.

Store locked up.

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

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Date of preparation / last revision

Creation date for SDS 06-02-2014. LS

03/04/2015 / -

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

* Data compared to the previous version altered. Updated to GHS Compliance. LS