09/12/2016	Kit Components	
Product code	Description	
SSKTBBR	Brown and Brenn Stain Kit	
Components:		
SSAHG04	Gentian Violet	
SSKC025	1% Safranin O	
SSSTUIO	Universal Iodine Solution	

Gram's Decolorizer

Advanced Picric Acid / Acetone

SSKC021

SSAHG01



Review Date 09/12/2016 Revision Date 08/08/2016

1 Identification of the Substance/Mixture and Company

Product Name: Gentian Violet

SDS Code: SSAHG04

Product Description: Histology Stain

Manufacturer/Supplier: American MasterTech 1330 Thurman Street Lodi, CA 95240 **USA**

(800) 860-4073

European Authorized Representative:

Emergo Europe Moleensraat 15 2513 BH The Hague, The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer. STOT SE 1 H370 Causes damage to organs.



Acute Tox. 4 H332 Harmful if inhaled.

Label elements

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





GHS07 GHS08

Signal word Danger

Hazard-determining components of labeling:

methanol

Hazard statements

Harmful if inhaled.

Suspected of causing cancer.

Causes damage to organs.

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Product Name: Gentian Violet

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 1

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

Fire = 1

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
67-56-1	methanol	<20%
548-62-9	C.I. Basic Violet 3	<5%

4 First Aid Measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

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

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

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Product Name: Gentian Violet

Information for 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 Firefighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Mount respiratory protective device.

Environmental precautions:

Dilute with plenty of water.

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).

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

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about protection against explosions and fires: Keep respiratory protective device available.

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.

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Product Name: Gentian Violet

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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

67-56	67-56-1 methanol	
PEL	Long-term value: 260 mg/m³, 200 ppm	
REL	Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin	
TLV	Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI	

Ingredients with biological limit values:

67-56-1 methanol

BEI 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

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.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

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.

Eye protection: Goggles recommended during refilling.

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Product Name: Gentian Violet

9 Physical and Chemical Properties

Information on basic physical and chemical properties **General Information Appearance** Form: Liquid Dark blue Color: Odor: Nearly odorless **Odor threshold:** Not determined. pH-value: Not determined. **Change in condition** Melting point/Melting range: Undetermined. **Boiling point/Boiling range:** Undetermined. Flash point: Not applicable. Flammability (solid, gaseous): Not applicable. 455 °C (851 °F) **Ignition temperature: Decomposition temperature:** Not determined. Product is not selfigniting. **Auto igniting:** Danger of explosion: Product does not present an explosion hazard. **Explosion limits:** Lower: 5.5 Vol % Upper: 44.0 Vol % Vapor pressure at 20 °C (68 °F): 128 hPa (96 mm Hg) **Density:** Not determined. **Relative density:** Not determined. Not determined. Vapour density: Not determined. **Evaporation rate:** Solubility in / Miscibility with Water: Fully miscible. Partition coefficient (n-octanol/water): Not determined. **Dynamic:** Not determined. **Kinematic:** Not determined. Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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.

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Product Name: Gentian Violet

Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicology Information

Information on toxicological effects

Acute toxicity:

LD/LC:	LD/LC50 values that are relevant for classification:		
67-56-1 methanol		nol	
Oral	LD50	5628 mg/kg (rat)	
Dermal	LD50	15800 mg/kg (rabbit)	
548-62-	548-62-9 C.I. Basic Violet 3		
Oral	LD50	420 mg/kg (rat)	

Primary irritant effect: On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization: No sensitizing effects known. **Additional toxicological information:**

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

Harmful

Carcinogenic categories

IARC (I	International	Agency	for	Research on	Cancer)
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None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

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Product Name: Gentian Violet

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, ADR, IMDG, IATA	Not applicable
Environmental hazards Marine pollutant:	No
Special precautions for user:	Not applicable.
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code:	of Not applicable.
UN "Model Regulation":	Not applicable

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture **SARA**

Section 35	Section 355 (extremely hazardous substances):	
None of the	e ingredients are listed.	
Section 31	3 (Specific toxic chemical listings):	
67-56-1 m	ethanol	
TSCA (To	xic Substances Control Act):	
67-56-1	methanol	
548-62-9	C.I. Basic Violet 3	
7732-18-5	water, distilled, conductivity or of similar purity	

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 are listed.

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Product Name: Gentian Violet

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

67-56-1 methanol

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients are listed.

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

None of the ingredients are listed.

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





GHS08

GHS07

Signal word Danger

Hazard-determining components of labeling:

methanol

Hazard statements

Harmful if inhaled.

Suspected of causing cancer.

Causes damage to organs.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Specific treatment (see on this label).

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

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 contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if

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Product Name: Gentian Violet

reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 09/12/2016 / -

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Acute Tox. 4: Acute toxicity - Category 4

Carc. 2: Carcinogenicity – Category 2

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1

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Review Date 09/12/2016 Revision Date 08/08/2016

1 Identification of the Substance/Mixture and Company

Product Name: 1% Safranin O

SDS Code: SSKC025

Product Description: Kit Component

Manufacturer/Supplier: American MasterTech 1330 Thurman Street Lodi, CA 95240 **USA**

European Authorized Representative:

Emergo Europe Moleensraat 15 2513 BH The Hague, The Netherlands

(800) 860-4073

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



GHS08 Health hazard

Carc. 1A H350 May cause cancer.

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



Signal word Danger

Hazard statements

May cause cancer.

Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

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Product Name: 1% Safranin O

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

 $\begin{aligned} & \text{Health} & = 1 \\ & \text{Fire} & = 0 \\ & \text{Reactivity} = 0 \\ & \textbf{Other hazards} \end{aligned}$

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
64-17-5	ethanol	<10%
477-73-6	3,7-diamino-2,8-dimethyl-5-phenylphenaziniumchloride	<5%

4 First Aid Measures

Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints. **After skin contact:** Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

Information for 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 Firefighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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: Not required.

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Product Name: 1% Safranin O

Environmental precautions:

Dilute with plenty of water.

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).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

No dangerous substances are released.

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

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Information about protection against explosions and fires: Keep respiratory protective device available.

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:

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

	64-17-5 ethanol	
ĺ	PEL	Long-term value: 1900 mg/m³, 1000 ppm
	REL	Long-term value: 1900 mg/m³, 1000 ppm
	TLV	Short-term value: 1880 mg/m³, 1000 ppm

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.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

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Product Name: 1% Safranin O

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.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

·		
Information on basic physical and chemical properties		
General Information		
Appearance		
Form:	Liquid	
Color:	Red	
Odor:	Like alcohol	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	425 °C (797 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure at 20 °C (68 °F):	23 hPa (17 mm Hg)	
Density:	Not determined.	
Relative density:	Not determined.	
Vapour density:	Not determined.	

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Product Name: 1% Safranin O

Evaporation rate: Not determined.

Solubility in / Miscibility with

Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Dynamic: Not determined.

Kinematic: Not determined.

Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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 Toxicology Information

Information on toxicological effects

Acute toxicity:

Primary irritant effect:
On the skin: No irritant effect.
On the eye: No irritating effect.

Sensitization: No sensitizing effects known. **Additional toxicological information:**

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

Carcinogenic categories

IARC (International Agency for Research on Cancer)	
64-17-5 ethanol	1
NTP (National Toxicology Program)	
None of the ingredients are listed.	
OSHA-Ca (Occupational Safety & Health Administration)	

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

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Product Name: 1% Safranin O

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Not applicable
Packing group DOT, ADR, IMDG, IATA	Not applicable
Environmental hazards Marine pollutant:	No
Special precautions for user:	Not applicable.
Transport in bulk according to Annex II MARPOL73/78 and the IBC Code:	I of Not applicable.
UN "Model Regulation":	Not applicable

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA

Section 355	(extremely	hazardous su	(bstances):
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None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

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Product Name: 1% Safranin O

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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 are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

64-17-5 ethanol

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

64-17-5 ethanol A3

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

None of the ingredients are listed.

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



GHS08

Signal word Danger

Hazard statements

May cause cancer.

Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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

National regulations:

Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

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Product Name: 1% Safranin O

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 09/12/2016 / -

Abbreviations and acronyms:

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

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Carc. 1A: Carcinogenicity - Category 1A

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Review Date 09/12/2016 Revision Date 08/08/2016

1 Identification of the Substance/Mixture and Company

Product Name: Universal Iodine Solution

SDS Code: SSSTUIO

Product Description: Histology Stain

Manufacturer/Supplier: American MasterTech 1330 Thurman Street Lodi, CA 95240 **USA**

European Authorized Representative:

Emergo Europe Moleensraat 15 2513 BH The Hague, The Netherlands

(800) 860-4073

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



GHS08 Health hazard

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.

Aquatic Acute 3 H402 Harmful to aquatic life.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

Information concerning particular hazards for human and environment:

The product has to be labeled due to the calculation procedure of international guidelines.

Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

Label elements

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



GHS08

Signal word Danger

Hazard-determining components of labeling:

potassium iodide

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Universal Iodine Solution

Hazard statements

Suspected of damaging fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Harmful to aquatic life.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

Store locked up.

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

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1

Fire = 0

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:		
7681-11-0	potassium iodide	<5%
7553-56-2	iodine	<1%

4 First Aid Measures

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water.

After swallowing: If symptoms persist consult doctor.

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Universal Iodine Solution

Information for 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 Firefighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture:

During heating or in case of fire poisonous gases are produced.

Advice for firefighters

Protective equipment: Mouth respiratory protective device.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Mount respiratory protective device.

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.

Dilute with plenty of water.

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).

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

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

Information about protection against explosions and fires: Keep respiratory protective device available.

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.

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Universal Iodine Solution

8 Exposure Controls/Personal Protection

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Com	Components with limit values that require monitoring at the workplace:		
7681	7681-11-0 potassium iodide		
TLV	TLV Long-term value: 0.01* ppm		
	*as inhalable fraction and vapor		
7553	7553-56-2 iodine		
PEL	Ceiling limit value: 1 mg/m³, 0.1 ppm		
REL	Ceiling limit value: 1 mg/m³, 0.1 ppm		
TLV	Short-term value: 1 mg/m³, 0.1** ppm		
	Long-term value: 0.1* mg/m³, 0.01* ppm		
	*as inhalable fraction and vapor; **vapor		

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.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

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.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form: Liquid Color: Brown Odor: Iodine

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Universal Iodine Solution

Odor threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 $^{\circ}$ C (68 $^{\circ}$ F):	23 hPa (17 mm Hg)
Density at 20 °C (68 °F):	1.1032 g/cm ³ (9.206 lbs/gal)
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/wate	er): Not determined.
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information:	No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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 Toxicology Information

Information on toxicological effects

Acute toxicity:

Primary irritant effect: On the skin: No irritant effect.

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Product Name: Universal Iodine Solution

On the eye: No irritating effect.

Sensitization: No sensitizing effects known. **Additional toxicological information:**

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

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Not applicable

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Product Name: Universal Iodine Solution

Packing group
DOT, ADR, IMDG, IATA
Not applicable

Environmental hazards
Marine pollutant:
No

Special precautions for user:
Not applicable.

Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code:
Not applicable.

UN "Model Regulation":
Not applicable

15 Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA

SARA
Section 355 (extremely hazardous substances).

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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 are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients are listed.

TLV (Threshold Limit Value established by ACGIH)

7553-56-2 iodine A4

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

None of the ingredients are listed.

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

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Universal Iodine Solution

Hazard pictograms



Signal word Danger

Hazard-determining components of labeling:

potassium iodide

Hazard statements

Suspected of damaging fertility or the unborn child.

Causes damage to organs through prolonged or repeated exposure.

Harmful to aquatic life.

Precautionary statements

Do not breathe dust/fume/gas/mist/vapors/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid release to the environment.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Get medical advice/attention if you feel unwell.

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 contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 09/12/2016 / -

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)

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Product Name: Universal Iodine Solution

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Aquatic Acute 3: Hazardous to the aquatic environment - acute aquatic hazard - Category 3

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Review Date 09/12/2016 Revision Date 08/08/2016

1 Identification of the Substance/Mixture and Company

Product Name: Advanced Picric Acid / Acetone

SDS Code: SSKC021

Product Description: Kit Component

Manufacturer/Supplier: American MasterTech 1330 Thurman Street Lodi, CA 95240 **USA** (800) 860-4073

European Authorized Representative:

Emergo Europe Moleensraat 15 2513 BH The Hague, The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Label elements

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



GHS07

Signal word Warning

Hazard-determining components of labeling:

acetone

Hazard statements

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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Product Name: Advanced Picric Acid / Acetone

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

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

Classification system:

NFPA ratings (scale 0 - 4)

Health = 2

Fire = 2

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

Fire = 2

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

67-64-1 acetone

<50%

4 First Aid Measures

Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Generally the product does not irritate the skin.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

Information for 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 Firefighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special hazards arising from the substance or mixture: No further relevant information available.

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Product Name: Advanced Picric Acid / Acetone

Advice for firefighters

Protective equipment: No special measures required.

6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Not required.

Environmental precautions:

Dilute with plenty of water.

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).

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

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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 t	that require m	onitoring at t	he workplace:
-----------------	----------------	----------------	----------------	---------------

67-64-1 acetone

PEL	Long-term value: 2400 mg/m³, 1000 ppm
REL	Long-term value: 590 mg/m³, 250 ppm
	Short-term value: 1187 mg/m³, 500 ppm
	Long-term value: 594 mg/m³, 250 ppm
	BEI

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Product Name: Advanced Picric Acid / Acetone

Ingredients with biological limit values:

67-64-1 acetone

BEI 50 mg/L

Medium: urine Time: end of shift

Parameter: Acetone (nonspecific)

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.

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.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties General Information		
Appearance		
Form:	Liquid	
Color:	Yellow	
Odor:	Acetone-like	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	

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Product Name: Advanced Picric Acid / Acetone

Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	465 °C (869 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	2.6 Vol %
Upper:	13.0 Vol %
Vapor pressure at 20 °C (68 °F):	233 hPa (175 mm Hg)
Density at 20 °C (68 °F):	0.89787 g/cm³ (7.493 lbs/gal)
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water): Not determined.	
Dynamic:	Not determined.
Kinematic:	Not determined.
Other information:	No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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 Toxicology Information

Information on toxicological effects

Acute toxicity:

Primary irritant effect: On the skin: No irritant effect. On the eye: Irritating effect.

Sensitization: No sensitizing effects known. **Additional toxicological information:**

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

Irritant

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Product Name: Advanced Picric Acid / Acetone

Carcinogenic categories

IARC (International Agency for Research on Cancer)

None of the ingredients are listed.

NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

UN-Number DOT, ADR, ADN, IMDG, IATA	Not applicable
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not applicable
Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA	
Class	Not applicable
Packing group	
DOT, ADR, IMDG, IATA	Not applicable

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Advanced Picric Acid / Acetone

Environmental hazards
Marine pollutant:
No

Special precautions for user:
Not applicable.

Transport in bulk according to Annex II of
MARPOL73/78 and the IBC Code:
Not applicable.

UN "Model Regulation":
Not applicable

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 are listed.

Section 313 (Specific toxic chemical listings):

88-89-1 | 2,4,6-trinitrophenol

TSCA (Toxic Substances Central Act):

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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 are listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

None of the ingredients are listed.

Carcinogenic categories

EPA (Environmental Protection Agency)	
67-64-1 acetone	I
TLV (Threshold Limit Value established by ACGIH)	
67-64-1 acetone	A4

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

None of the ingredients are listed.

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



Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Advanced Picric Acid / Acetone

Signal word Warning

Hazard-determining components of labeling:

acetone

Hazard statements

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear eye protection / face protection.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

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 contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 09/12/2016 / -

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)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Advanced Picric Acid / Acetone

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

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Review Date 09/12/2016 Revision Date 08/08/2016

1 Identification of the Substance/Mixture and Company

Product Name: Gram's Decolorizer

SDS Code: SSAHG01

Product Description: Laboratory Reagent

Manufacturer/Supplier: American MasterTech 1330 Thurman Street Lodi, CA 95240 **USA**

(800) 860-4073

European Authorized Representative:

Emergo Europe Moleensraat 15 2513 BH The Hague, The Netherlands

Emergency Telephone Number: Infotrac (800) 535-5053 (24 hours) - International (011) 352-323-3500

2 Hazards Identification

Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS08 Health hazard

Carc. 1A H350 May cause cancer.



GHS07

Eye Irrit. 2A H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

Label elements

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







GHS02

GHS07 GHS08

Signal word Danger

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Gram's Decolorizer

Hazard-determining components of labeling:

acetone

Hazard statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause cancer.

May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

If on skin (or hair): 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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

In case of fire: Use for extinction: CO2, powder or water spray.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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

Classification system:

NFPA ratings (scale 0 - 4)

Health = 1

Fire = 3

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 1

Fire = 3

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

3 Composition

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

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Product Name: Gram's Decolorizer

Dangerous components:		
67-64-1	acetone	<50%
64-17-5	ethanol	<50%

4 First Aid Measures

Description of first aid measures

General information: Immediately remove any clothing soiled by the product.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Immediately rinse with water.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist consult doctor.

Information for 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 Firefighting Measures

Extinguishing media

Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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:

Dilute with plenty of water.

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).

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

Handling:

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

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Open and handle receptacle with care.

Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

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

Com	Components with limit values that require monitoring at the workplace:				
67-64	67-64-1 acetone				
PEL	PEL Long-term value: 2400 mg/m³, 1000 ppm				
REL	REL Long-term value: 590 mg/m³, 250 ppm				
TLV	Short-term value: 1187 mg/m³, 500 ppm				
	Long-term value: 594 mg/m³, 250 ppm				
	BEI				
64-17	64-17-5 ethanol				
PEL	Long-term value: 1900 mg/m³, 1000 ppm				
REL	Long-term value: 1900 mg/m³, 1000 ppm				
TLV	Short-term value: 1880 mg/m³, 1000 ppm				
Ingre	Ingredients with biological limit values:				

Ingredients with biological limit values:

67-64-1 acetone

BEI 50 mg/L

Medium: urine Time: end of shift

Parameter: Acetone (nonspecific)

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.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

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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.

Eye protection: Tightly sealed goggles

9 Physical and Chemical Properties

Information on basic physical and chemical properties		
General Information		
Appearance	T' '1	
Form:	Liquid Colorless	
Color: Odor:	Acetone-like	
Odor threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	55 °C (131 °F)	
Flash point:	-19 °C (-2 °F)	
Flammability (solid, gaseous):	Not applicable.	
Ignition temperature:	425 °C (797 °F)	
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
Explosion limits:		
Lower:	2.6 Vol %	
Upper:	15.0 Vol %	
Vapor pressure at 20 °C (68 °F):	233 hPa (175 mm Hg)	
Density at 20 °C (68 °F):	0.79 g/cm³ (6.593 lbs/gal)	
Relative density:	Not determined.	
Vapour density:	Not determined.	

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Product Name: Gram's Decolorizer

Evaporation rate: Not determined.

Solubility in / Miscibility with

Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Dynamic: Not determined.

Kinematic: Not determined.

Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity: No further relevant information available.

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 Toxicology Information

Information on toxicological effects

Acute toxicity:

LD/LC50 values that are relevant for classification:			
67-64-1	67-64-1 acetone		
Oral	LD50	5800 mg/kg (rat)	
Dermal	LD50	20000 mg/kg (rabbit)	

Primary irritant effect: On the skin: No irritant effect. On the eye: Irritating effect.

Sensitization: No sensitizing effects known. **Additional toxicological information:**

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

Irritant

Carcinogenic categories

IARC (International Agency for Research on Cancer)		
64-17-5 ethanol	1	
NTP (National Toxicology Program)		
None of the ingredients are listed.		
OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients are listed.		

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12 Ecological Information

Toxicity:

Aquatic toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

PBT: Not applicable. **vPvB:** Not applicable.

Other adverse effects: No further relevant information available.

13 Disposal Considerations

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations. **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

UN-Number DOT, ADR, IMDG, IATA	UN1090
UN proper shipping name	
DOT	Acetone
ADR	1090 Acetone
IMDG, IATA	ACETONE

Transport hazard class(es)

DOT



Class 3 Flammable liquids Label 3

ADR, IMDG, IATA



Class 3 Flammable liquids

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Product Name: Gram's Decolorizer

Label 3 Packing group DOT, ADR, IMDG, IATA II **Environmental hazards Marine pollutant:** No **Special precautions for user:** Warning: Flammable liquids Danger code (Kemler): **EMS Number:** F-E,S-D **Stowage Category** Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable. **Transport/Additional information: Quantity limitations** On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L **ADR** Code: E2 **Excepted quantities (EQ)** Maximum net quantity per inner packaging: 30 ml

Limited quantities (LQ)

Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

Maximum net quantity per outer packaging: 500 ml

UN "Model Regulation": UN 1090 ACETONE, 3, II

15 Regulatory Information

IMDG

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA

Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

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 are listed.

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Product Name: Gram's Decolorizer

Chemicals known to cause reproductive toxicity for males:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity:

64-17-5 | ethanol

Carcinogenic categories

Carcino	genic categories	
EPA (E1	nvironmental Protection Agency)	
67-64-1	acetone	I
TLV (T	hreshold Limit Value established by ACGIH)	
67-64-1	acetone	A4
64-17-5	ethanol	A3
NIOSH-	Ca (National Institute for Occupational Safety and Health)	
None of	the ingredients are listed.	

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







GHS02

GHS07

GHS08

Signal word Danger

Hazard-determining components of labeling:

acetone

Hazard statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause cancer.

May cause drowsiness or dizziness.

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Avoid breathing dust/fume/gas/mist/vapors/spray

Wear protective gloves / eye protection / face protection.

Ground/bond container and receiving equipment.

Use only non-sparking tools.

Take precautionary measures against static discharge.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

If on skin (or hair): 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.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

Review Date 09/12/2016 Revision Date 08/08/2016

Product Name: Gram's Decolorizer

In case of fire: Use for extinction: CO2, powder or water spray.

Store locked up.

Store in a well-ventilated place. Keep container tightly closed.

Store in a well-ventilated place. Keep cool.

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

National regulations:

Additional classification according to Decree on Hazardous Materials:

Carcinogenic hazardous material group III (dangerous).

Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

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

16 Other Information

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 09/12/2016 / -

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flam. Liq. 2: Flammable liquids - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Carc. 1A: Carcinogenicity - Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

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