

02/14/2018

Kit Components

Product code	Description
SSKTBHG	Brown - Hopps Gram Stain Kit

Components:

SSKC791	Brown-Hopps 1% Crystal Violet
SSKC792	Brown-Hopps 0.1% Basic Fuchsin
SSKC793	Brown-Hopps Gallego's Solution
SSKC794	Brown-Hopps Picric Acid / Acetone
SSSTUIO	Universal Iodine Solution



SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

1 Identification of the Substance/Mixture and Company

Product Name: Brown-Hopps 1% Crystal Violet

SDS Code: SSKC791

Product Description: Kit Component

Manufacturer/Supplier:

American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:

Emergo Europe
Prinsessegracht 20
2514 AP 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.

Aquatic Acute 3 H402 Harmful to aquatic life.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

Label elements

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

Hazard pictograms



GHS08

Signal word Warning

Hazard statements

Suspected of causing cancer.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Obtain special instructions before use.

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

Avoid release to the environment.

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

IF exposed or concerned: Get medical advice/attention.

Store locked up.

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Product Name: Brown-Hopps 1% Crystal Violet

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:**

548-62-9	C.I. Basic Violet 3	1%
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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:** 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: Not required.**Environmental precautions:**

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

Dilute with plenty of water.

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Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet

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.

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.

Protective Action Criteria for Chemicals

PAC-1:		
548-62-9	C.I. Basic Violet 3	0.082 mg/m ³
PAC-2:		
548-62-9	C.I. Basic Violet 3	0.9 mg/m ³
PAC-3:		
548-62-9	C.I. Basic Violet 3	83 mg/m ³

7 Handling and Storage

Handling:

Precautions for safe handling: No special precautions are necessary if used correctly.

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: None.

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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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.

Breathing equipment: Not required.

Protection of hands:

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

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In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet
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.

9 Physical and Chemical Properties

Information on basic physical and chemical properties
General Information
Appearance

Form:	Liquid
Color:	Dark blue
Odor:	Nearly odorless
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.

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 (17.3 mm Hg)

Density:	Not determined.
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.

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In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet
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:****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:

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.**Ecotoxicological effects:****Remark:** Harmful to fish**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.

Harmful to aquatic organisms

Results of PBT and vPvB assessment**PBT:** Not applicable.**vPvB:** Not applicable.

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In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet
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 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):

None of the ingredients is listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

TSCA new (21st Century Act) (Substances not listed)

548-62-9 | C.I. Basic Violet 3

Proposition 65
Chemicals known to cause cancer:

None of the ingredients is listed.

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In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet
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)

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

Signal word Warning

Hazard statements

Suspected of causing cancer.

Harmful to aquatic life.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Obtain special instructions before use.

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

Avoid release to the environment.

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

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 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

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/14/2018

Product Name: Brown-Hopps 1% Crystal Violet

Date of preparation / last revision 02/14/2018 / -**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

Carc. 2: Carcinogenicity – Category 2

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

1 Identification of the Substance/Mixture and Company

Product Name: Brown-Hopps 0.1% Basic Fuchsin

SDS Code: SSKC792

Product Description: Kit Component

Manufacturer/Supplier:

American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:

Emergo Europe
Prinsessegracht 20
2514 AP 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

The product is not classified according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

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: Not applicable

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin

4 First Aid Measures

Description of first aid measures
General information: No special measures required.

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: 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: 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).

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.

Protective Action Criteria for Chemicals
PAC-1:

None of the ingredients are listed.

PAC-2:

None of the ingredients are listed.

PAC-3:

 None of the ingredients are listed.

7 Handling and Storage

Handling:
Precautions for safe handling: No special measures required.

Information about protection against explosions and fires: No special measures required.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin

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:** None.**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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

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

The usual precautionary measures for handling chemicals should be followed.

Breathing equipment: Not required.**Protection of hands:**

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.

9 Physical and Chemical Properties

Information on basic physical and chemical properties**General Information****Appearance**

Form:	Liquid
Color:	Dark
Odor:	Odorless
Odor threshold:	Not determined.

pH-value:	Not determined.
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Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin

Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
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 (17.3 mm Hg)
Density:	Not determined.
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:** No irritating effect.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin
Carcinogenic categories

IARC (International Agency for Research on Cancer)		
632-99-5	(4-(4-aminophenyl)(4-iminocyclohexa-2,5-dienylidene)methyl)-2-methylanilinehydrochloride	2B
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

Waste treatment methods:
Recommendation:

Smaller quantities can be disposed of with household waste.

Disposal must be according to official regulations.

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

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin

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

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.

**TSCA new (21st Century Act) (Substances not 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)

None of the ingredients are listed.

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

None of the ingredients are listed.

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

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In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps 0.1% Basic Fuchsin

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** 02/14/2018 / -**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

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SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

1 Identification of the Substance/Mixture and Company

Product Name: Brown-Hopps Gallego's Solution

SDS Code: SSKC793

Product Description: Kit Component

Manufacturer/Supplier:

American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:

Emergo Europe
Prinsessegracht 20
2514 AP 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

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1A H350 May cause cancer.



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



GHS07



GHS08

Signal word Danger

Hazard-determining components of labeling:

formaldehyde

Hazard statements

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

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Product Name: Brown-Hopps Gallego's Solution

Precautionary statements

Obtain special instructions before use.

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

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

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

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

If on skin: Wash with plenty of water.

If exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

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 = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

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:**

50-00-0	formaldehyde	<2%
64-19-7	acetic acid	<1%

4 First Aid Measures

Description of first aid measures**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.**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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

5 Firefighting 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: 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.

Protective Action Criteria for Chemicals**PAC-1:**

50-00-0	formaldehyde	0.90 ppm
64-19-7	acetic acid	5 ppm

PAC-2:

50-00-0	formaldehyde	14 ppm
64-19-7	acetic acid	35 ppm

PAC-3:

50-00-0	formaldehyde	56 ppm
64-19-7	acetic acid	250 ppm

7 Handling and Storage

Handling:**Precautions for safe handling:** Ensure good ventilation/exhaustion at the workplace.**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:** None.**Specific end use(s):** No further relevant information available.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

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:

50-00-0 formaldehyde

PEL	Short-term value: 2 ppm Long-term value: 0.75 ppm see 29 CFR 1910.1048(c)
REL	Long-term value: 0.016 ppm Ceiling limit value: 0.1* ppm *15-min; See Pocket Guide App. A
TLV	Short-term value: 0.37 mg/m ³ , 0.3 ppm Long-term value: 0.12 mg/m ³ , 0.1 ppm DSEN; RSEN

64-19-7 acetic acid

PEL	Long-term value: 25 mg/m ³ , 10 ppm
REL	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 ppm
TLV	Short-term value: 37 mg/m ³ , 15 ppm Long-term value: 25 mg/m ³ , 10 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.
Immediately remove all soiled and contaminated clothing.
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

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

9 Physical and Chemical Properties

Information on basic physical and chemical properties

General Information

Appearance

Form:	Liquid
Color:	Colorless
Odor:	Like aldehyde
Odor threshold:	Not determined.

pH-value:	Not determined.
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Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

Flash point:	Not applicable.
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Flammability (solid, gaseous):	Not applicable.
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Decomposition temperature:	Not determined.
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Auto igniting:	Product is not selfigniting.
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Danger of explosion:	Product does not present an explosion hazard.
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Explosion limits:

Lower:	Not determined.
Upper:	Not determined.

Vapor pressure at 20 °C (68 °F):	23 hPa (17.3 mm Hg)
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Density:	Not determined.
Relative density:	Not determined.
Vapour density:	Not determined.
Evaporation rate:	Not determined.

Solubility in / Miscibility with

Water:	Fully miscible.
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Partition coefficient (n-octanol/water):	Not determined.
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Dynamic:	Not determined.
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Kinematic:	Not determined.
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Other information:	No further relevant information available.
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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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

11 Toxicology Information

Information on toxicological effects
Acute toxicity:

LD/LC50 values that are relevant for classification:

50-00-0 formaldehyde

Oral LD50	>200 mg/kg (rat)
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Primary irritant effect:
On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization: Sensitization possible through skin contact.

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)

50-00-0 formaldehyde	1
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NTP (National Toxicology Program)

50-00-0 formaldehyde	K
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OSHA-Ca (Occupational Safety & Health Administration)

50-00-0 formaldehyde	
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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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

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 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):

50-00-0 formaldehyde

Section 313 (Specific toxic chemical listings):

50-00-0 formaldehyde

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65
Chemicals known to cause cancer:

50-00-0 formaldehyde

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)

50-00-0 formaldehyde

B1

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

TLV (Threshold Limit Value established by ACGIH)		
50-00-0	formaldehyde	A2
NIOSH-Ca (National Institute for Occupational Safety and Health)		
50-00-0	formaldehyde	

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:

formaldehyde

Hazard statements

May cause an allergic skin reaction.

Suspected of causing genetic defects.

May cause cancer.

Precautionary statements

Obtain special instructions before use.

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

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

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

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

If on skin: Wash with plenty of water.

If exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

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

Wash contaminated clothing before reuse.

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.

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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Gallego's Solution

Department issuing SDS: Regulatory Department**Contact:** Phone (800) 860-4073**Date of preparation / last revision** 02/14/2018 / -**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

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1A: Carcinogenicity – Category 1A

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SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

1 Identification of the Substance/Mixture and Company

Product Name: Brown-Hopps Picric Acid / Acetone

SDS Code: SSKC794

Product Description: Kit Component

Manufacturer/Supplier:

American MasterTech
1330 Thurman Street
Lodi, CA 95240
USA
(800) 860-4073

European Authorized Representative:

Emergo Europe
Prinsessegracht 20
2514 AP 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.



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

Signal word Danger

Hazard-determining components of labeling:

acetone

Hazard statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

Precautionary statements

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

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

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

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

Store in a well-ventilated place. Keep cool.

Store locked up.

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

Classification system:**NEPA ratings (scale 0 - 4)**

Health = 2

Fire = 3

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 2

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.**Dangerous components:**

67-64-1	acetone	<100%
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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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone
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).

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.

Protective Action Criteria for Chemicals
PAC-1:

67-64-1	acetone	200 ppm
88-89-1	2,4,6-trinitrophenol	0.3 mg/m ³

PAC-2:

67-64-1	acetone	3200* ppm
88-89-1	2,4,6-trinitrophenol	17 mg/m ³

PAC-3:

67-64-1	acetone	5700* ppm
88-89-1	2,4,6-trinitrophenol	100 mg/m ³

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

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****Components with limit values that require monitoring at the workplace:****67-64-1 acetone**

PEL	Long-term value: 2400 mg/m ³ , 1000 ppm
REL	Long-term value: 590 mg/m ³ , 250 ppm
TLV	Short-term value: 1187 mg/m ³ , 500 ppm
	Long-term value: 594 mg/m ³ , 250 ppm
BEI	

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: Not required.**Protection of hands:**

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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone
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:	-94.7 °C (-138.5 °F)
Boiling point/Boiling range:	55 °C (131 °F)
Flash point:	-19 °C (-2.2 °F)
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 is not explosive. However, formation of explosive air/vapor mixtures are possible.
Explosion limits:	
Lower:	2.6 Vol %
Upper:	13 Vol %
Vapor pressure at 20 °C (68 °F):	233 hPa (174.8 mm Hg)
Density at 20 °C (68 °F):	0.79 g/cm ³ (6.59255 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):	
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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone
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 acetone

Oral	LD50	5,800 mg/kg (rat)
Dermal	LD50	20,000 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)

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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

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	UN1993
UN proper shipping name DOT ADR IMDG, IATA	Flammable liquids, n.o.s. (Acetone) 1993 Flammable liquids, n.o.s. (Acetone) FLAMMABLE LIQUID, N.O.S. (ACETONE)
Transport hazard class(es) DOT	
	
Class Label	3 Flammable liquids 3
ADR, IMDG, IATA	
	
Class Label	3 Flammable liquids 3
Packing group DOT, ADR, IMDG, IATA	II
Environmental hazards Marine pollutant:	No
Special precautions for user: Danger code (Kemler): EMS Number: Stowage Category	Warning: Flammable liquids 33 F-E, <u>S</u> -E B
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
Transport/Additional information: DOT Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

ADR Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN 1993 FLAMMABLE LIQUIDS, N.O.S. (ACETONE), 3, II

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 Control Act):

All ingredients are listed.

TSCA new (21st Century Act) (Substances not 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).

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

Hazard pictograms

GHS02 GHS07

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

acetone

Hazard statements

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Precautionary statements

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

Ground/bond container and receiving equipment.

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

Use only non-sparking tools.

Take precautionary measures against static discharge.

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

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

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

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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

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

Call a poison center/doctor if you feel unwell.

If eye irritation persists: Get medical advice/attention.

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

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

Store in a well-ventilated place. Keep cool.

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** 02/14/2018 / -

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 02/08/2018

Product Name: Brown-Hopps Picric Acid / Acetone

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

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SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

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
(800) 860-4073

European Authorized Representative:

Emergo Europe
Prinsessegracht 20
2514 AP 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

Aquatic Acute 3 H402 Harmful to aquatic life.

Label elements

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

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements

Harmful to aquatic life.

Precautionary statements

Avoid release to the environment.

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

Classification system:

NEPA 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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

3 Composition

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

Dangerous components:		
7681-11-0	potassium iodide	2.5-10%
7553-56-2	iodine	≥0.25-≤2.5%

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: 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: 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).

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.

Protective Action Criteria for Chemicals

PAC-1:		
7681-11-0	potassium iodide	1.3 mg/m ³
7553-56-2	iodine	0.1 ppm
PAC-2:		
7681-11-0	potassium iodide	15 mg/m ³
7553-56-2	iodine	0.5 ppm

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

PAC-3:		
7681-11-0	potassium iodide	87 mg/m ³
7553-56-2	iodine	5 ppm

7 Handling and Storage

Handling:
Precautions for safe handling: No special precautions are necessary if used correctly.

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: None.

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:	
7681-11-0 potassium iodide	
TLV	Long-term value: 0.01* ppm *as inhalable fraction and vapor
7553-56-2 iodine	
PEL	Ceiling limit value: 1 mg/m ³ , 0.1 ppm
REL	Ceiling limit value: 1 mg/m ³ , 0.1 ppm
TLV	Short-term value: 1 mg/m ³ , 0.1** ppm Long-term value: 0.1* mg/m ³ , 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: Wash hands before breaks and at the end of work.

Breathing equipment: Not required.

Protection of hands:

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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

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.

9 Physical and Chemical Properties

Information on basic physical and chemical properties**General Information****Appearance**

Form:	Liquid
Color:	Brown
Odor:	Characteristic
Odor threshold:	Not determined.

pH-value:	Not determined.
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Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	100 °C (212 °F)

Flash point:	Not applicable.
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Flammability (solid, gaseous):	Not applicable.
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Decomposition temperature:	Not determined.
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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 (17.3 mm Hg)
---	---------------------

Density at 20 °C (68 °F):	1.1032 g/cm ³ (9.2062 lbs/gal)
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Relative density:	Not determined.
--------------------------	-----------------

Vapour density:	Not determined.
------------------------	-----------------

Evaporation rate:	Not determined.
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Solubility in / Miscibility with

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

Dynamic:	Not determined.
-----------------	-----------------

Kinematic:	Not determined.
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Other information:	No further relevant information available.
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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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

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:
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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

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 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):

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.

SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 02/14/2018

Revision Date 01/31/2018

Product Name: Universal Iodine Solution

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).

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements

Harmful to aquatic life.

Precautionary statements

Avoid release to the environment.

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

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Department issuing SDS: Regulatory Department

Contact: Phone (800) 860-4073

Date of preparation / last revision 02/14/2018 / -

Abbreviations and acronyms:

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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)

HMS: 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

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

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