



## SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 01/31/2018

Revision Date 01/31/2018

### 1 Identification of the Substance/Mixture and Company

**Product Name:** Picric Acid / Acetone (Traditional Formulation)

**SDS Code:** SSSTPAA

**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**



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 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**


---

**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 = 4

Reactivity = 2

**HMIS-ratings (scale 0 - 4)**

Health = 2

Fire = 4

Reactivity = 2

**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 | 50-100% |
|---------|---------|---------|

---

### 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 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**


---

**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:**CO<sub>2</sub>, 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 <sup>3</sup> |

**PAC-2:**

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

**PAC-3:**

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

---

## 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 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**


---

**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 <sup>3</sup> , 1000 ppm |
| REL | Long-term value: 590 mg/m <sup>3</sup> , 250 ppm   |
| TLV | Short-term value: 1187 mg/m <sup>3</sup> , 500 ppm |
|     | Long-term value: 594 mg/m <sup>3</sup> , 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 01/31/2018

Revision Date 01/31/2018

**Product Name: Picric Acid / Acetone (Traditional Formulation)**
**Eye protection:** Tightly sealed goggles

### 9 Physical and Chemical Properties

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

|                        |                 |
|------------------------|-----------------|
| <b>Form:</b>           | Liquid          |
| <b>Color:</b>          | Yellow          |
| <b>Odor:</b>           | Acetone-like    |
| <b>Odor threshold:</b> | Not determined. |

|                  |                 |
|------------------|-----------------|
| <b>pH-value:</b> | Not determined. |
|------------------|-----------------|

**Change in condition**

|                                     |                      |
|-------------------------------------|----------------------|
| <b>Melting point/Melting range:</b> | -94.7 °C (-138.5 °F) |
| <b>Boiling point/Boiling range:</b> | 55 °C (131 °F)       |

|                     |                  |
|---------------------|------------------|
| <b>Flash point:</b> | -19 °C (-2.2 °F) |
|---------------------|------------------|

|                                       |                 |
|---------------------------------------|-----------------|
| <b>Flammability (solid, gaseous):</b> | Not applicable. |
|---------------------------------------|-----------------|

|                              |                 |
|------------------------------|-----------------|
| <b>Ignition temperature:</b> | 465 °C (869 °F) |
|------------------------------|-----------------|

|                                   |                 |
|-----------------------------------|-----------------|
| <b>Decomposition temperature:</b> | Not determined. |
|-----------------------------------|-----------------|

|                       |                              |
|-----------------------|------------------------------|
| <b>Auto igniting:</b> | Product is not selfigniting. |
|-----------------------|------------------------------|

|                             |                                                                                            |
|-----------------------------|--------------------------------------------------------------------------------------------|
| <b>Danger of explosion:</b> | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
|-----------------------------|--------------------------------------------------------------------------------------------|

**Explosion limits:**

|               |           |
|---------------|-----------|
| <b>Lower:</b> | 2.6 Vol % |
| <b>Upper:</b> | 13 Vol %  |

|                                         |                       |
|-----------------------------------------|-----------------------|
| <b>Vapor pressure at 20 °C (68 °F):</b> | 233 hPa (174.8 mm Hg) |
|-----------------------------------------|-----------------------|

|                          |                 |
|--------------------------|-----------------|
| <b>Density:</b>          | Not determined. |
| <b>Relative density:</b> | Not determined. |
| <b>Vapour density:</b>   | Not determined. |
| <b>Evaporation rate:</b> | Not determined. |

**Solubility in / Miscibility with**

|               |                 |
|---------------|-----------------|
| <b>Water:</b> | Fully miscible. |
|---------------|-----------------|

|                                                 |                 |
|-------------------------------------------------|-----------------|
| <b>Partition coefficient (n-octanol/water):</b> | Not determined. |
|-------------------------------------------------|-----------------|

|                 |                 |
|-----------------|-----------------|
| <b>Dynamic:</b> | Not determined. |
|-----------------|-----------------|

|                   |                 |
|-------------------|-----------------|
| <b>Kinematic:</b> | Not determined. |
|-------------------|-----------------|

|                           |                                            |
|---------------------------|--------------------------------------------|
| <b>Other information:</b> | 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 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**


---

**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 01/31/2018

Revision Date 01/31/2018

**Product Name: Picric Acid / Acetone (Traditional Formulation)**

### 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

|                                                                                                                       |                                                                 |
|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <b>UN-Number</b><br><b>DOT, ADR, IMDG, IATA</b>                                                                       | UN1090                                                          |
| <b>UN proper shipping name</b><br><b>DOT</b><br><b>ADR</b><br><b>IMDG, IATA</b>                                       | Acetone<br>1090 Acetone<br>ACETONE                              |
| <b>Transport hazard class(es)</b><br><b>DOT</b>                                                                       |                                                                 |
|                                     |                                                                 |
| <b>Class</b><br><b>Label</b>                                                                                          | 3 Flammable liquids<br>3                                        |
| <b>ADR, IMDG, IATA</b>                                                                                                |                                                                 |
|                                    |                                                                 |
| <b>Class</b><br><b>Label</b>                                                                                          | 3 Flammable liquids<br>3                                        |
| <b>Packing group</b><br><b>DOT, ADR, IMDG, IATA</b>                                                                   | 3<br>II                                                         |
| <b>Environmental hazards</b><br><b>Marine pollutant:</b>                                                              | No                                                              |
| <b>Special precautions for user:</b><br><b>Danger code (Kemler):</b><br><b>EMS Number:</b><br><b>Stowage Category</b> | Warning: Flammable liquids<br>33<br>F-E,S-D<br>E                |
| <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>                                       | Not applicable.                                                 |
| <b>Transport/Additional information:</b><br><b>DOT</b><br><b>Quantity limitations</b>                                 | On passenger aircraft/rail: 5 L<br>On cargo aircraft only: 60 L |

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/31/2018

Revision Date 01/31/2018

**Product Name: Picric Acid / Acetone (Traditional Formulation)**

|                                                                                  |                                                                                                                       |
|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>ADR</b><br><b>Excepted quantities (EQ)</b>                                    | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml       |
| <b>IMDG</b><br><b>Limited quantities (LQ)</b><br><b>Excepted quantities (EQ)</b> | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| <b>UN "Model Regulation":</b>                                                    | UN 1090 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 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**


---

**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: CO<sub>2</sub>, 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** 01/31/2018 / -

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/31/2018

Revision Date 01/31/2018

---

**Product Name: Picric Acid / Acetone (Traditional Formulation)**

---

**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

**Copyright © 2018-2019 American MasterTech Scientific. All rights reserved.**

No part of these pages may be used for any purpose other than personal use. Therefore, reproduction, modification, storage in a retrieval system or retransmission, in any form or by any means, for reasons other than personal use, is strictly prohibited without prior written permission.