



## SAFETY DATA SHEET

In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

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

**Product Name:** Uranyl Nitrate, Reagent

**SDS Code:** SSAHUNI

**CAS Number:**

13520-83-7

**EC number:**

233-266-3

**Index number:**

092-002-00-3

**Product Description:** Dry Chemical

**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**



GHS06 Skull and crossbones

Acute Tox. 2      H300 Fatal if swallowed.

Acute Tox. 2      H330 Fatal if inhaled.



GHS08 Health hazard

STOT RE 2      H373 May cause damage to organs through prolonged or repeated exposure.



GHS09 Environment

Aquatic Chronic 2   H411 Toxic to aquatic life with long lasting effects.

**Label elements**

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

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

---

**Product Name: Uranyl Nitrate, Reagent**


---

**Hazard pictograms**

GHS06   GHS08   GHS09

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

uranyl nitrate, hexahydrate

**Hazard statements**

Fatal if swallowed or if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

**Precautionary statements**

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

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Immediately call a poison center/doctor.

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

Get medical advice/attention if you feel unwell.

Specific treatment is urgent (see on this label).

Rinse mouth.

Collect spillage.

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

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 = 3

Reactivity = 0

The substance possesses oxidizing properties.

**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: Substances****CAS No. Description**

13520-83-7 uranyl nitrate, hexahydrate

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**
**Identification number(s)**
**EC number:** 233-266-3

**Index number:** 092-002-00-3

### 4 First Aid Measures

**Description of first aid measures**
**General information:**

Immediately remove any clothing soiled by the product.

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

Remove breathing apparatus only after contaminated clothing have been completely removed.

In case of irregular breathing or respiratory arrest provide artificial respiration.

**After inhalation:**

Supply fresh air or oxygen; call for doctor.

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

**After skin contact:** Immediately wash with water and soap and rinse thoroughly.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** Do not induce vomiting; immediately call for medical help.

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

**Advice for firefighters**
**Protective equipment:** Mouth respiratory protective device.

### 6 Accidental Release Measures

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

**Environmental precautions:**

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

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

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

**Methods and material for containment and cleaning up:**

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:**

 1.3 mg/m<sup>3</sup>

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**

<b>PAC-2:</b>	
	7 mg/m <sup>3</sup>
<b>PAC-3:</b>	
	42 mg/m <sup>3</sup>

## 7 Handling and Storage

**Handling:**
**Precautions for safe handling:**

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

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

**Conditions for safe storage, including any incompatibilities**
**Storage:**
**Requirements to be met by storerooms and receptacles:** No special requirements.

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

**Further information about storage conditions:** Keep receptacle tightly sealed.

**Specific end use(s):** No further relevant information available.

## 8 Exposure Controls/Personal Protection

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

**Control parameters**

<b>Components with limit values that require monitoring at the workplace:</b>	
<b>13520-83-7 uranyl nitrate, hexahydrate</b>	
PEL	Long-term value: 0.05* 0.25** mg/m <sup>3</sup> as U; *soluble; **insoluble
REL	Short-term value: 0.6** mg/m <sup>3</sup> Long-term value: 0.05* 0.2** mg/m <sup>3</sup> as U; *soluble**insoluble; See Pocket Guide App.A
TLV	Short-term value: 0.6 mg/m <sup>3</sup> Long-term value: 0.2 mg/m <sup>3</sup> as U; BEI

**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

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**

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.

**Penetration time of glove material:**

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

**Eye protection:** Tightly sealed goggles

## 9 Physical and Chemical Properties

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

<b>Form:</b>	Crystalline
<b>Color:</b>	Yellow
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	Not determined.

**pH-value:** Not applicable.

**Change in condition**

<b>Melting point/Melting range:</b>	59.5 °C (139.1 °F)
<b>Boiling point/Boiling range:</b>	100 °C (212 °F)

**Flash point:** Not applicable.

**Flammability (solid, gaseous):** Product is not flammable.

**Decomposition temperature:** Not determined.

**Auto igniting:** Not determined.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits:**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**Vapor pressure:** Not applicable.

**Density at 20 °C (68 °F):** 2.807 g/cm<sup>3</sup> (23.42442 lbs/gal)

<b>Bulk density:</b>	1,500 kg/m <sup>3</sup>
<b>Relative density:</b>	Not determined.
<b>Vapour density:</b>	Not applicable.
<b>Evaporation rate:</b>	Not applicable.

**Solubility in / Miscibility with**

**Water at 20 °C (68 °F):** 550 g/l

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

**Dynamic:** Not applicable.

**Kinematic:** Not applicable.

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**
**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:**
**Carcinogenic categories**
**IARC (International Agency for Research on Cancer)**

Substance is not listed.

**NTP (National Toxicology Program)**

Substance is not listed.

**OSHA-Ca (Occupational Safety & Health Administration)**

Substance is not 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:** Toxic for fish

**Additional ecological information:**
**General notes:**

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

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

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

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**
**Results of PBT and vPvB assessment**
**PBT:** Not applicable.

**vPvB:** Not applicable.





**Other adverse effects:** No further relevant information available.

### 13 Disposal Considerations

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

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

### 14 Transport Information

<b>UN-Number</b> <b>DOT, ADR, IMDG, IATA</b>	UN1477
<b>UN proper shipping name</b> <b>DOT</b> <b>ADR</b> <b>IMDG, IATA</b>	Nitrates, inorganic, n.o.s. 1477 Nitrates, inorganic, n.o.s., ENVIRONMENTALLY HAZARDOUS NITRATES, INORGANIC, N.O.S.
<b>Transport hazard class(es)</b> <b>DOT</b>	
	
<b>Class</b>	5.1 Oxidizing substances
<b>ADR</b>	
 	
<b>Class</b>	5.1 Oxidizing substances
<b>IMDG, IATA</b>	
	
<b>Class</b>	5.1 Oxidizing substances
<b>Packing group</b> <b>DOT, ADR, IMDG, IATA</b>	II
<b>Environmental hazards</b> <b>Marine pollutant:</b> <b>Special marking (ADR):</b>	No Symbol (fish and tree)
<b>Special precautions for user:</b>	Warning: Oxidizing substances

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

**Product Name: Uranyl Nitrate, Reagent**

<b>EMS Number:</b>	F-A,S-Q
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	Not applicable.
<b>Transport/Additional information:</b>	
<b>ADR Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
<b>UN "Model Regulation":</b>	UN 1477 NITRATES, INORGANIC, N.O.S., 5.1, II, ENVIRONMENTALLY HAZARDOUS

## 15 Regulatory Information

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

**Section 355 (extremely hazardous substances):**

Substance is not listed.

**Section 313 (Specific toxic chemical listings):**

Substance is not listed.

**TSCA (Toxic Substances Control Act):**

Substance is not listed.

**TSCA new (21st Century Act) (Substances not listed)  
 Proposition 65**
**Chemicals known to cause cancer:**

Substance is not listed.

**Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

**Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

**Chemicals known to cause developmental toxicity:**

Substance is not listed.

**Carcinogenic categories**
**EPA (Environmental Protection Agency)**

Substance is not listed.

**TLV (Threshold Limit Value established by ACGIH)**

A1

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

Substance is listed.

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



# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

---

**Product Name: Uranyl Nitrate, Reagent**


---

**Hazard pictograms**

GHS06   GHS08   GHS09

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

uranyl nitrate, hexahydrate

**Hazard statements**

Fatal if swallowed or if inhaled.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

**Precautionary statements**

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

Wash thoroughly after handling.

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

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

[In case of inadequate ventilation] wear respiratory protection.

If swallowed: Immediately call a poison center/doctor.

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

Get medical advice/attention if you feel unwell.

Specific treatment is urgent (see on this label).

Rinse mouth.

Collect spillage.

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

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** 01/22/2018 / -**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

# SAFETY DATA SHEET

## In Accordance with ISO/DIS 11014

Review Date 01/22/2018

Revision Date 01/22/2018

---

**Product Name: Uranyl Nitrate, Reagent**

---

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  
Acute Tox. 2: Acute toxicity – Category 2  
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2  
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

**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.