

URANYLESS

Version : 2.0

Version date : 2020-12-03

Reference : Reynolds lead citrate 3%

Impression date : 2020-12-03

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product identifier

Name of product : **Uranyless**

Product code : 11000, 11000-200

1.2 Relevant identified uses of the substance or mixture and uses advised against :

Contrast agent for electron microscopy guaranteed uranium free.

1.3 Details of the supplier of the safety data sheet

Company : Delta Microscopies

Address : 22 bis route de Saint Ybars ,
31190 Mauressac France

Telephone : +33 (0) 5 61 73 60 14

Fax +33 (0) 5 61 80 78 53

Email address : info@deltamicroscopies.com

1.4 Emergency telephone number

Emergency call number in France : + 33 (0) 1 45 42 59 59 (National Poisons) .

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture :



GHS07

Skin corr. 2
Eye Dam. 2
Stot S e 3

H315
H319
H335

Causes an irritation skin
Causes a severe irritation of the eyes
May irritate the respiratory tract

2.2 Label content:

Etiquetage in accordance with the regulation (EC) No 1272/2008 [EU-GHS / CLP] .

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Pictogram :

Signal word : Warning

Hazard statement :

H315 Causes skin irritation.

H319 : Causes serious eye irritation.

H335 : May irritate the respiratory tract

Tips caution :

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.

P305 + P351 + P338 IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses if the victim is wearing them and they can be easily removed. Continue to rinse.

2.3 Other hazards : none .**3. COMPOSITION / INFORMATION ON INGREDIENTS**3.1 **Substances** : Mixture acetate lanthanides less than 1%.

Formula : not specified

Molecular weight : not specified

Components	CAS number	EC number	%mass
Lanthanum salts	100587-90-4	213-034-8	Concentration less than < 1
Gadolinium salts	19598-90-4	233-437-2	Concentration less than < 1
Dysprosium salts	100641-13-2	233-410-5	Concentration less than < 1
Water	7732-18-5	231-791-2	> 97

4. FIRST AID MEASURES**4.1 Description of first aid measures****General advice** : Consult a physician. Show this safety data sheet to the doctor in attendance.**In case of inhalation** : Transport the person out of the contaminated area. In case of respiratory arrest, give artificial respiration. See a doctor.**In case of skin contact** : The aver soap with a large quantity of water. If irritation develops, contact a physician.**In case in eyes** : Remove contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.**If swallowed** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. See a doctor.

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4.2 Main symptoms and effects, both acute and delayed :

To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

4.3 Indication of any immediate medical attention and special treatment needed :

Data not available.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media :

The product is neither flammable nor explosive. Use extinguishing media appropriate to local conditions and the surrounding environment.

5.2 Special hazards arising from the substance or mixture :

Oxides of carbon, oxides of lanthanides

5.3 Advice for firefighters :

Porter self-contained breathing apparatus to fight against the fire, if necessary.

5.4 Additional information :

Data not available

6. MEASURES TO TAKE IN ACCIDENTAL RELEASE

6.1 Personal precautions :

Use personal protective equipment . E avoid dust formation. Avoid breathing vapors, spray mist or gases. Provide adequate ventilation. Evacuate the staff to safe place. Avoid inhalation of dust.

6.2 Precautions for environmental protection :

Prevent product from entering drains.

6.3 Methods and materials for containment and cleaning up :

R raise and disposal without creating dust. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections :

For disposal, see section 13.

7. HANDLING AND STORAGE

7.1 Precautions to ensure safe handling :

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide adequate ventilation in places where dust forms.

7.2 Safe storage conditions :

E ntreposer in a cool place. Keep container tightly closed in a dry and well-ventilated place.

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8. EXPOSURE CONTRAL / PERSONAL PROTECTION**8.1 Control parameters**

Components with occupational exposure limit values : Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls : Handle in accordance with good industrial hygiene practices and safety guidelines . Wash hands before breaks and at the end of the work day.

Personal protective equipment :

Eye / face protection : Safety glasses with side shields. Use eye protection equipment tested and approved according to applicable standards and regulations. Such as NIOSH (US) or EN 166 (EU).

Hand / Skin Protection : Handle with gloves. Use an appropriate glove removal technique to prevent skin contact with the product (ie without touching the outer surface of the glove). Gloves p rotection selected must satisfy the specifications of EU Directive 89/686 / EEC and standard EN 374 that follows. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practice. Wash and dry hands.

General measures are protection and hygiene : A nsure the presence of rinses eye and a do uche safety. Use adequate ventilation. Handle in accordance with good industrial hygiene practices and safety instructions. Wash hands before breaks and at the end of the work day.

Respiratory protection : In the event of nuisance exposure, use a respirator with a particle filter type P1 (EN143) or type N95 (US). Use equipment tested and approved by standards such as NIOSH (US) or CEN (EU).

Body protection : C hoose protection according to the amount and concentration of the dangerous substance at work.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Appearance**

Form : liquid

Color : transparent white

Odor : no characteristic odor

9.2 Information on basic physical and chemical properties

pH : close to 7

Melting point : no data available

Boiling point : 100 ° C

Flash point : no data available

Ignition temperature : no data available

Self-ignition capacity : no data available

Lower explosion limit : no data available

Upper explosion limit : no data available

Oxidising properties : no data available

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Vapor pressure at 20 ° C : no data available

Average relative density : no data available

Hydro - solubility : very soluble

Organic solvents : no data available

Solids content : no data available

Viscosity : no data available

Vapor density : no data available

Evaporation rate : no data available

Conductivity : no data available

Others : no data available

10. STABILITY AND REACTIVITY

10.1 Chemical stability : stable under recommended storage conditions.

10.2 Conditions to avoid : no data available

10.3 Materials to avoid : strong oxidizers

10.4 Possibility of a hazardous reaction : no data available

10.5 Hazardous decomposition products : no data available.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : no data available.

Skin irritation / corrosion Skin : No data available.

Serious eye damage / eye irritation : no data available.

Respiratory or skin sensitization : no data available

Germ cell mutagenicity : no data available.

Carcinogenicity : IARC : No component of this product present at concentrations greater than or equal to 0.1% has been identified as a probable, possible or recognized human carcinogen by the IARC.

Reproductive toxicity : no data available.

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Specific target organ toxicity - single exposure : no data available.

Specific target organ toxicity - repeated exposure : no data available.

Aspiration hazard : no data available

Potential health effects :

Inhalation : possibly harmful. Can irritate the respiratory system.

Ingestion : possibly harmful.

Skin : possibly harmful. May cause skin irritation.

Eyes : may cause irritation.

Signs and Symptoms of Exposure : To our knowledge, the chemical, physical and toxicological properties have not been fully investigated.

Additional information : RTECS : no data available

12. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

12.1 Ecotoxic effects : no data available.

12.2 Persistence and degradability : no data available.

12.3 Bioaccumulative potential : no data available.

12.4 Mobility in soil : no data available

12.5 Results of PBT and vPvB assessment : no data available.

12.6 Other adverse effects : no data available .

13. DISPOSAL CONSIDERATIONS IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

13.1 Method of disposal of the substance / mixture : Hand over surplus and non-recyclable solutions to an approved waste disposal company.

A identified : mixture of lanthanides (rares earths) in aqueous solution with low concentration (less than 1%)

Disposal of contaminated packaging : Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 No-ONU / UN number :

ADR / RID : - IMDG : - IATA : - Data not available

14.2 UN proper shipping name

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ADR / RID: Non-dangerous goods

IMDG: Non-dangerous goods

IATA: Non-dangerous goods

14.3 Transport hazard class (es)

ADR / RID : - IMDG : - IATA : - Data not available

14.4 Packing group

ADR / RID: - IMDG: - IATA: - Data not available

14.5 Environmental hazards :

ADR / RID: no IMDG : marine pollutant : no IATA : no

14.6 Special precautions for user: Data not available

15. INFORMATION REGULATORY

15.1 Label information :

Directives and regulations according to CE : SDS according to Reg CE N ° 1907/2006

Identification and characterization of the product : Al₂O₃

15.2 Chemical safety assessment : data not available

16. OTHER DATA

Department responsible for the SDS: Delta Microscopies France

Contact : Delta Microscopies France

Other information :

ADR : European Agreement on the Transport of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

vPvB : very Persistent and very Bioaccumulative

The above information has been prepared on the basis of the best information available at the time of writing. They do not claim to be exhaustive and should be considered as a guide. This information relates only to the specific product designated on this sheet and is not applicable for this product used in combination with other products or obtained by other processes. It is the user's responsibility to carry out their own investigations to determine the relevance of the information for their specific application.

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