

SECTION 1: Identification

1.1 Identification

Product Name: **Uranyless E staining solution in 30% Ethanol**

Product Code: 29-005037 & 29-005039

1.2 Relevant identified uses of substance or mixture and not recommended uses

Contrast agent for electron microscopy guaranteed uranium free

1.3 Information about the security data sheet provider

Micro to Nano
Tappersweg 91
2031ET Haarlem
Netherlands
Tel: +31(0)85-2013155
E: info@microtonano.com

1.4 Emergency call number

112 (NLD) or your national emergency telephone number for chemical spills, leaks, fires, exposures or accidents

SECTION 2: Identification of hazards

2.1 Classification of 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



GHS02

Flam.liq.2
Eye Dam. 2

H225
H319
Causes serious eye irritation

2.2 Labeling items:

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



Pictogram :

Signal word : Danger

Hazard statement :

H225 : Highly flammable liquid and vapour
H315 : Causes skin irritation.
H319 : Causes serious eye irritation. H335 :
May irritate the respiratory tract

Tips caution :

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
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 dangers:

Results of PBT and vPvB evaluations: Not applicable

SECTION 3: Composition/component information

3.1 Substances:

not applicable

3.2 Mixture:

Mixture lanthanides <3%. Formula :

not specified Molecular weight : not specified

Components	CAS number	EC number	%mass
Mixture acetate lanthanides			< 3
Ethanol	64-17-5	200-578-6	30

HEADING 4: First aid

4.1 Description of first aid

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 : Wash 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

4.2 Main symptoms and effects, acute and delayed

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

4.3 Indications of any immediate medical care and special treatment required

Data not available

HEADING 5: Firefighting measures

5.1 Ways to extinguish

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

5.2 Specific hazards resulting from substance or mixture

Oxides of carbon, oxides of lanthanides

5.3 Advice to firefighters

Porter a breathing apparatus if necessary

HEADING 6: Measures in case of accidental dispersal

6.1 Individual precautions, protective equipment and emergency procedures

Use personal protective equipment. 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 Containment and cleaning methods and equipment

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

6.4 Reference to other topics

For information for safe handling, see Chapter 7. For information on personal protective equipment, see Chapter 8. For information on disposal, see Chapter 13.

SECTION 7: Manipulation and storage

7.1 Precautions to Take for Safe Handling

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

7.2 Conditions for safe storage, including possible incompatibilities

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

7.3 Special Final Use

Laboratory use

SECTION 8: Exposure controls/individual protection

8.1 Control Settings

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

8.2 Exposure control

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 protection 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 : Ensure the presence of eye rinses and a safety shower. 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 : Choose protection according to the amount and concentration of the dangerous substance at work.

HEADING 9: Physical and chemical properties

9.1 Information on essential physical and chemical properties

Appearance: Liquid

Color: transparent

Smell: characteristic odor

Olfactory threshold: data not available

pH: close to 6

Melting point: data not available

Boiling point/interval: 56°C

Flashpoint: data not available

Flammability (solid, gas): data not available

Decomposition temperature: data not available

Danger of explosion data not available.

Explosive limit, higher: data not available

Explosive limit, lower: data not available

Vapor pressure: data not available

Relative density: data not available

Relative steam density: no data available

Solubility in / Miscibility with Water: no data available

Partition coefficient (n-octanol/water): no data available

Viscosity, dynamic: no data available

Viscosity, cinematic: no data available

9.2 More information

void

SECTION 10: Stability and responsiveness

10.1 reactivity

It is a reactive substance. Risk of ignition. Vapors may form an explosive mixture with air. When heated Risk of ignition.

10.2 Chemical stability

no data available

10.3 Conditions to avoid

strong oxidizers.

10.4 Incompatible materials

Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Do not smoke.

10.5 Dangerous composition products

Hazardous combustion products

10.6 Possibility of dangerous reaction

no data available

HEADING 11: Toxicological information

11.1 Toxicological Effects Information

Acute toxicity

no data available

Skin corrosion/skin irritation

No data available

Serious eye damage/eye irritation

Causes severe eye irritation.

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Components

ethanol

Acute toxicity

LD50 Oral - Rat - male and female - 10.470 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - male and female - 4 h - 124,7 mg/l - vapor

(OECD Test Guideline 403)

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 24 h

(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes serious eye irritation.

(OECD Test Guideline 405)

Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

Carcinogenicity

No data available
This product contains no known carcinogenic chemicals.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available

HEADING 12: Ecological information

- 12.1 **Toxicity**
no data available
- 12.2 **Persistence and degradability**
no data available
- 12.3 **Bioaccumulation Potential**
No other important information available.
- 12.4 **Mobility in the ground**
no data available
- 12.5 **Results of PBT and vPvB evaluations**
no data available
- 12.6 **Other adverse effects**
No other important information available.

HEADING 13: Elimination considerations

- 13.1 **Waste Treatment Methods**
Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
Disposal of contaminated packaging : Dispose of as unused product.

HEADING 14: Transportation information

14.1 UN Number
ADR

UN1170

14.2 United Nations Shipping Name
ADR
IMDG
IATA

1170 ETHANOL (ETHYL ALCOHOL)
ETHANOL (ETHYL ALCOHOL)
ETHANOL

14.3 Transport Danger Class

ADR, IMDG, IATA



class **3 Flammable liquids**
label **3**
II

14.4 Packing Group
ADR, IMDG, IATA

14.5 Dangers for the environment

No applicable

14.6 Special precautions to be taken by the user Hazard identification number (Kemler code): EMS Number:
Stowage Category

Warning: Flammable liquids 33
F-E,S-D
A

14.7 Bulk transport in accordance with Schedule II of the MARPOL Convention and the IBC

On passenger aircraft/rail: 5 L
On cargo aircraft only: 60 L

DOT
Quantity limitations

Code: E2
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml

ADR
Excepted quantities (EQ)

IMDG

1L

Limited quantities (LQ) 1L
Excepted quantities (EQ)

Code: E2

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

UN "standard rules"

UN 1170 ETHANOL (ETHYL ALCOHOL), 3, II

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific to the substance or mixture

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

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

15.2 Chemical safety assessment: data not available

SECTION 16: More information

These indications are based on the current state of our knowledge, but do not constitute a guarantee as to the properties of the product and do not give rise to a contractual legal relationship. They do not claim to be exhaustive and should be considered as a guide

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 End of the SDS