

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product form : Mixture  
Trade name : **USISOFT 40**  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use  
Use of the substance/mixture : Complexing agent - for professional use only

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

IGOL FRANCE  
614, rue de Cagny - CS 69003  
80094 AMIENS CEDEX 3 - France  
T +33 (0)3 22 50 22 22  
[msds@igol.com](mailto:msds@igol.com) - [www.igol.com](http://www.igol.com)

#### 1.4. Emergency telephone number

<b>United Kingdom</b>	<b>National Poisons Information Service (Cardiff Centre)</b> Gwenwyn Ward, Wolfson Unit Penarth CF64 2XX Cardiff <b>0844 892 0111 (UK only, Monday to Friday, 08.00 to 18.00 hours)</b>
-----------------------	---

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute Tox. 4 (Oral) H302  
Acute Tox. 4 (Inhalation) H332  
Skin Irrit. 2 H315  
Eye Dam. 1 H318

Full text of hazard classes and H-statements : see section 16

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS07

Signal word (CLP) : **Danger**  
Hazardous ingredients : tetrasodium ethylene diamine tetraacetate  
Hazard statements (CLP) : H302+H332 - Harmful if swallowed or if inhaled  
H315 - Causes skin irritation  
H318 - Causes serious eye damage  
Precautionary statements (CLP) : P271 - Use only outdoors or in a well-ventilated area  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P312 - IF SWALLOWED: call a POISON CENTER or doctor/physician if you feel unwell  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER, a doctor  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell  
P332+P313 - If skin irritation occurs: Get medical advice/attention

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Not applicable

### 3.2. Mixture

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
tetrasodium ethylene diamine tetraacetate	(CAS No) 64-02-8 (EC no) 200-573-9 (EC index no) 607-428-00-2 (REACH-no) 01-2119486762-27	25 - 50	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Eye Dam. 1, H318
sodium hydroxide, caustic soda	(CAS No) 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6 (REACH-no) 01-2119457892-27	0,1 - 1	Met. Corr. 1, H290 Skin Corr. 1A, H314

#### Specific concentration limits:

Name	Product identifier	Specific concentration limits
sodium hydroxide, caustic soda	(CAS No) 1310-73-2 (EC no) 215-185-5 (EC index no) 011-002-00-6 (REACH-no) 01-2119457892-27	( 0,5 =<C < 2) Eye Irrit. 2, H319 ( 0,5 =<C < 2) Skin Irrit. 2, H315 ( 2 =<C < 5) Skin Corr. 1B, H314 ( C >= 5) Skin Corr. 1A, H314

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: In all cases of doubt, or when symptoms persist, seek medical attention.
First-aid measures after inhalation	: In the event of faintness in consequence of exposure, immediately transport the victim to the fresh air. Obtain medical attention if breathing difficulty persists.
First-aid measures after skin contact	: Wash contaminated clothing before reuse. Wash with plenty of soap and water. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: Contact ophthalmologist immediately. Remove contact lenses, if present and easy to do. Continue rinsing. In case of eye contact, immediately rinse with clean water for 10-15 minutes.
First-aid measures after ingestion	: Do not induce vomiting. If swallowed, rinse mouth with water (only if the person is conscious). Immediately call a POISON CENTER or doctor/physician. Never give anything by mouth to an unconscious person.

### 4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation	: Harmful if inhaled.
Symptoms/injuries after skin contact	: Causes skin irritation. Prolonged or repeated contacts with the skin may cause dermatitis.
Symptoms/injuries after eye contact	: Causes serious eye damage. Redness. Pain.
Symptoms/injuries after ingestion	: Harmful if swallowed.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Dry powder. Foam. Sand. AFFF foam. Water spray. Carbon dioxide.
Unsuitable extinguishing media	: Do not use water jet.

### 5.2. Special hazards arising from the substance or mixture

Reactivity in case of fire	: On burning: release of harmful/irritant gases/vapours. Carbon oxides (CO, CO2).
----------------------------	---

### 5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Exercise caution when fighting any chemical fire.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Self-contained breathing apparatus.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Protective equipment : Concerning personal protective equipment to use, see section 8. Wear suitable protective clothing and gloves.
- Emergency procedures : Evacuate unnecessary personnel. Soak up with inert absorbent material (for example sand, sawdust, a universal binder, silica gel). Provide adequate ventilation.

##### 6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing and gloves. Avoid breathing Aerosols, Vapours. Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area. Clean up any spills as soon as possible, using an absorbent material to collect it. Stop leak if safe to do so.

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Notify authorities if liquid enters sewers or public waters.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Collect all waste in suitable and labelled containers and dispose according to local legislation.

#### 6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. For disposal of residues refer to section 13 : Disposal considerations" "

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Additional hazards when processed : Provide proper grounding.
- Precautions for safe handling : Provide good ventilation in process area to prevent formation of vapour. Keep away from sources of ignition - No smoking. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke in areas where product is used.
- Hygiene measures : Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with skin, eyes and clothing.

#### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
- Storage conditions : Keep away from sources of ignition - No smoking. Store in original container. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Keep container tightly closed. Keep container closed when not in use.
- Heat and ignition sources : No flames, no sparks. Eliminate all sources of ignition.
- Prohibitions on mixed storage : Oxidation agents.
- Storage area : Store away from heat. Floors should be impervious, resistant to liquids and easy to clean.
- Special rules on packaging : Keep only in original container.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

sodium hydroxide, caustic soda (1310-73-2)		
United Kingdom	Local name	Sodium hydroxide
United Kingdom	WEL STEL (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>

#### 8.2. Exposure controls

- Personal protective equipment : Avoid all unnecessary exposure.

Materials for protective clothing	: Separate working clothes from town clothes. Launder separately
Hand protection	: Wear suitable gloves resistant to chemical penetration. Chemical resistant gloves (according to European standard NF EN 374 or equivalent). Time of penetration is to be checked with the glove producer
Eye protection	: Eye protection, including both chemical splash goggles and face shield, must be worn when possibility exists for eye contact due to spraying liquid or airborne particles
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Avoid the formation of mists in the atmosphere. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended. respirator with combination filter for vapour/particles
Other information	: Provide local exhaust or general room ventilation to minimize vapour concentrations.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: pale. Yellow.
Odour	: characteristic.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1020 kg/m <sup>3</sup> (15 °C) [NFT 60-101]
Solubility	: Water: Miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Stable at ambient temperature and under normal conditions of use.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

All heat sources, including direct sunlight. Sparks. Open flame.

### 10.5. Incompatible materials

Strong oxidizers. Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

No additional information available

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Inhalation: Harmful if inhaled.

ATE CLP (oral)	1420,455 mg/kg bodyweight
ATE CLP (gases)	4500,000 ppmv/4h
ATE CLP (vapours)	11,000 mg/l/4h
ATE CLP (dust,mist)	1,500 mg/l/4h

#### tetrasodium ethylene diamine tetraacetate (64-02-8)

LD50 oral	1780 mg/kg
-----------	------------

#### sodium hydroxide, caustic soda (1310-73-2)

LD50 oral rat	> 2000 mg/kg
---------------	--------------

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

### SECTION 12: Ecological information

#### 12.1. Toxicity

#### tetrasodium ethylene diamine tetraacetate (64-02-8)

LC50 fish 1	121 mg/l (Lepomis macrochirus, 96h)
EC50 Daphnia 1	625 mg/l (Daphnia magna, 24h) [DIN 38412, part 11]
EC50 other aquatic organisms 1	> 100 mg/l (48h)
EC50 72h algae (1)	> 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
NOEC chronic fish	>= 25,7 mg/l (Danio rerio, 35d) (OECD 210 method)
NOEC chronic crustacea	25 mg/l (Daphnia magna, 21d) [EEC Guideline XI/681/86, Draft 4]

#### sodium hydroxide, caustic soda (1310-73-2)

LC50 fish 1	125 mg/l (Gambusia affinis, 96h)
EC50 Daphnia 1	76 mg/l (Daphnia magna, 24h)
EC50 other aquatic organisms 1	22 mg/l (Photobacterium phosphoreum, 15min)
LC50 fish 2	145 mg/l (Poecilia reticulata; 24 h)

#### 12.2. Persistence and degradability

#### tetrasodium ethylene diamine tetraacetate (64-02-8)

Biodegradation	5 % (28 d) [OECD 302 B]
----------------	-------------------------

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

Component	
tetrasodium ethylene diamine tetraacetate (64-02-8)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

#### 12.6. Other adverse effects

Additional information : Do not discharge the product into the environment. Do not flush into surface water or sewer system






### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations : Do not discharge into drains or the environment. Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

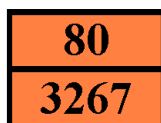
In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number</b>				
3267	3267	3267	3267	3267
<b>14.2. UN proper shipping name</b>				
CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	Corrosive liquid, basic, organic, n.o.s.	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
<b>Transport document description</b>				
UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (tetrasodium ethylene diamine tetraacetate), 8, III, (E)	UN 3267 CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S., 8, III			
<b>14.3. Transport hazard class(es)</b>				
8	8	8	8	8
				
<b>14.4. Packing group</b>				
III	III	III	III	III
<b>14.5. Environmental hazards</b>				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

#### 14.6. Special precautions for user

##### - Overland transport

Classification code (ADR) : C7  
 Special provisions (ADR) : 274  
 Limited quantities (ADR) : 5I  
 Excepted quantities (ADR) : E1  
 Packing instructions (ADR) : P001, IBC03, LP01, R001  
 Mixed packing provisions (ADR) : MP19  
 Portable tank and bulk container instructions (ADR) : T7  
 Portable tank and bulk container special provisions (ADR) : TP1, TP28  
 Tank code (ADR) : L4BN  
 Vehicle for tank carriage : AT  
 Transport category (ADR) : 3  
 Special provisions for carriage - Packages (ADR) : V12  
 Hazard identification number (Kemler No.) : 80  
 Orange plates :



Tunnel restriction code (ADR) : E  
 EAC code : 2X  
 APP code : B

**- Transport by sea**

Special provisions (IMDG)	: 223, 274
Limited quantities (IMDG)	: 5 L
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: P001, LP01
IBC packing instructions (IMDG)	: IBC03
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP28
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-B
Stowage category (IMDG)	: A
Properties and observations (IMDG)	: Reacts violently with acids. Causes burns to skin, eyes and mucous membranes.

**- Air transport**

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y841
PCA limited quantity max net quantity (IATA)	: 1L
PCA packing instructions (IATA)	: 852
PCA max net quantity (IATA)	: 5L
CAO packing instructions (IATA)	: 856
CAO max net quantity (IATA)	: 60L
Special provisions (IATA)	: A3
ERG code (IATA)	: 8L

**- Inland waterway transport**

Classification code (ADN)	: C7
Special provisions (ADN)	: 274
Limited quantities (ADN)	: 5 L
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP
Number of blue cones/lights (ADN)	: 0
Carriage prohibited (ADN)	: No
Not subject to ADN	: No

**- Rail transport**

Classification code (RID)	: C7
Special provisions (RID)	: 274
Limited quantities (RID)	: 5L
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P001, IBC03, LP01, R001
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1, TP28
Tank codes for RID tanks (RID)	: L4BN
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W12
Colis express (express parcels) (RID)	: CE8
Hazard identification number (RID)	: 80
Carriage prohibited (RID)	: No

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

#### 15.1.2. National regulations

No additional information available

#### 15.2. Chemical safety assessment

No additional information available

### SECTION 16: Other information

Training advice : Not to be used for any purpose other than the one the product was designed for.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Met. Corr. 1	Corrosive to metals, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H318	Causes serious eye damage
H332	Harmful if inhaled

*The Material Safety Data Sheet was drawn up in compliance with the actual regulation in force. It is only provided for information and can be modified without notice period. It can't be considered as a product warranty. Its sole publication does not create juridical and contractual engagements. A possible contractual relation can only occur from a contract, subjected by the general IGOLs sell conditions, between IGOL and another party. The information given in the Material Safety Data Sheet are based on the state of our knowledge relative to the product at the date indicated. The information, given bona fide, is strictly meant to advice users on security aspects. Then, the information can't be considered as products specifications. The product's specifications and applications can't be deduced from the information given on this Material Safety Data Sheet. The sheet completes the technical data sheet but doesn't replace it. The information presented in the Material Safety Data Sheet won't unload the user to evaluate the risks linked to its use of the product and to respect the regulation applied. The user's attention is attracted on the potential risks when a product is used for a different application than the one it is produced for. The user has to get informed and to apply all the regulation of its activity. The data and the legal prescriptions cited in the sheet only aim to help the user to respect some obligations. The user can't consider the data by as exhaustive. The user will take on its own responsibility the safe practices for the use of the product. IGOL can't be considered as responsible for the damages resulting of the material handling, stocking, use or destruction. The Material Safety Data Sheet was set up especially for this product and can only, since then, be used for this one. Besides, if the product is used as a component for another product, the user's attention is attracted on the fact that for that case the information can't be applicable.*