NU-CYCLE 1

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

1.1. Product identifier

Product name	NU-CYCLE 1
Product code	ISEU-701-00

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

Relevant identified uses	Hard water detergent for commercial dishwashers
Uses advised against	Not available

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

Name	Innu-Science UK
Address	44 Burners Lane, Kiln Farm, Milton Keynes, MK11 3HD, ENGLAND
Telephone	+44 (0)1908 545 749
Telefax	+44 (0) 845 8623317
Contact email	tim.cozens@innuscience.com

1.4. Emergency telephone number

Telephone	United Kingdom : NHS Direct: +44 0845 4647

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Skin Corr. 1A	H314 Causes severe skin burns and eye damage.

2.2. Label elements according to the regulation (EC) n°1272/2008 (CLP) and its amendments

Danger symbol

Signal word	**Danger**
Hazard statements (H)	H314 Causes severe skin burns and eye damage.
Additional label element	
Prevention statements	P280 Wear protective gloves, protective clothing and eye/face protection.
Response statements	P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER or a doctor P363 Wash contaminated clothing before reuse.
Storage statements	None

Disposal statements None

2.3. Other hazards

Not available

SECTION 3 : Composition/information on ingredients

Name	(%)	Classification	Specific concentration limits
Sodium Hydroxide CAS N°: 1310-73-2 EC N°: 215-185-5 IDX N°: 011-002-00-6	5% ≤ C ≤ 10%	Skin Corr. 1A: H314	-

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4 : First aid measures

4.1. Description of first aid measures

General information: Immediately call a POISON CENTER or doctor.

Following inhalation: Remove person to fresh air and keep comfortable for breathing.

Following skin contact (or on hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

Following eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion: Rinse mouth. Do NOT induce vomiting.

For emergency responders: No data available

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

Symptoms: No data available
Effects: No data available

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

Treat according to symptoms.

SECTION 5 : Firefighting measures

5.1. Extinguishing media

Appropriated : foam, carbon dioxide, chemical powder
Inappropriated : No data available

5.2. Special hazards arising from the substance or mixture

No data available

5.3. Advice for firefighters

In case of fire: Wear appropriate apparatus of breathing and protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate unprotected persons from danger area.
Use required personal protective equipment.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Clean contaminated sites immediately.

6.4. Reference to other sections

Refer to sections: 7 safe handling, 8 for personal protective equipments, 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with eyes, skin and clothes.
Use required personal protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from incompatible materials.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Components with critical values that require monitoring at the workplace (DE)

Substance	VME, 8 hours (France)		VLE, 15 minutes (France)		VME, 8 hours (United Kingdom)		VLE, 15 minutes (United Kingdom)	
	ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$	ppm	$mg.m^{-3}$
sodium hydroxide		2				2		

8.2. Exposure controls

Appropriate engineering controls

Local exhaust ventilation may be necessary to prevent airborne contaminants exceed their exposure limits.

Eye/face protection : Appropriate safety glasses.

Skin/hand protection : Wear impervious gloves and chemical resistant.

Respiratory protection : No respiratory protection is required in general.

Thermal hazards : No data available

Hygiene measures : Do not drink, eat or smoke near the product. Wash hands before and after handling.

Environmental exposure controls	Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid
Color	Colorless
Odour	Odorless
Odor threshold	No data available
pH	12.0 - 12.5
Melting / Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability	No data available
Lower limit of flammability or explosive	No data available
Upper limit of flammability or explosive	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.20 - 1.30
Water solubility	Easily soluble in water
Solubility in other Solvents	No data available
Log Kow	No data available
Auto-inflammability temperature	No data available
Decomposition temperature	No data available
Viscosity	< 10 cP
Explosive properties	No data available
Oxidizing properties	No data available

9.2. Other information

Cinematic viscosity	< 10 cSt

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

10.2. Chemical stability

The colour of the product may change with time, but with no impact on performance.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

Avoid heat and the direct sunlight.

10.5. Incompatible materials

Strong acids

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 11: Toxicological information

Acute toxicity	Not classified LD50 > 5000 mg/Kg (oral/rat) (calculated) LD50 > 5000 mg/Kg (dermal/rat) (calculated)
Skin corrosion	Causes severe skin burns.
Eye damage	Causes eye damage.
Respiratory sensibilisation	Not classified (the classification criteria are not met).
Germ cell mutagenicity	Not classified (the classification criteria are not met).
Carcinogenicity	Not classified (the classification criteria are not met).
Toxic for reproduction	Not classified (the classification criteria are not met).
Unique specific toxicity	Not classified (the classification criteria are not met).
Repeated specific toxicity	Not classified (the classification criteria are not met).
Aspiration hazard	Not classified (the classification criteria are not met).
Other information	Practical experience: None General information: The classification was made according to the assessment procedure for preparations.

SECTION 12: Ecological information

12.1. Toxicity	Acute toxicity, LC50 (calculated): > 100 mg/l
12.2. Persistence and degradability	The organic ingredients are readily biodegradable according to the OECD 301 methods
12.3. Bioaccumulative potential	Not available
12.4. Mobility in soil	Not available
12.5. Results of PBT and vPvB assessment	Not available
12.6. Other adverse effects	Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose in accordance with local and national regulations.

13.2. Waste code numbers/Waste identification

No data available

SECTION 14: Transport information

	ADR	ADN/ADNR	IMDG	ICAO
14.1. UN number	1824			
14.2. UN proper shipping name	HYDROXYDE DE SODIUM EN SOLUTION			
14.3. Transport hazard class(es)	8		8	8
14.4. Packing group	III		III	III
14.5. Environmental hazards	No data available	No data available	No data available	No data available
Hazard label				
Classification code	C5			
14.6. Special precautions for user	No data available			
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No data available			
Other information	Not available	Not available	Not available	Not available

SECTION 15: Regulatory information

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

Regulation : FR Valeurs Limites d'Exposition Professionnelle (VLEP)

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : EU Cosmetic Regulation 1223/2009 : Annex III (restrictions)

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : EU REACH : Registered substances

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : US : Toxic Substances Control Act Inventory List (TSCA)

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : WORLD : International Fragrance Association List (IFRA List)

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : JP : Japan : CSCL Existing Chemical Substances

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : CN : China IECSC 2013

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

Regulation : CA : Domestic Substances List (DSL)

Substance	CAS	EC
Sodium Hydroxide	1310-73-2	215-185-5

15.2. Chemical safety assessment

No data available

SECTION 16: Other information

16.1. Indication of changes (Additions, Deletions, Revisions)

Creation date: 14/08/15
Revision date: 28/06/16
Indication on changes: The details of the supplier (section 1.3) and toxicological information (section 11).

16.2. Key or legend to abbreviations and acronyms

ADN / ADNR: Regulations concerning the transport of dangerous substances in barges on the waterways.
ADR / RID: European Agreement concerning the international carriage of dangerous goods by road / Regulations concerning the international carriage of dangerous goods by rail.
CAS: Chemical Abstract Service Number
CLP: Classification, Label, Package
VOC: Volatile Organic Compounds
DSD: Dangerous Substances Directive
DPD: Dangerous Preparations Directive
N°EC: European Commission Number
PPE: Personal Protective Equipment
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods code
PBT: Persistent, bioaccumulative, toxic
UN Number: UN Number
UVCB: Unknown or variable composition of substances, complex reaction products and biological materials
vPvB: Very Persistent, very Bioaccumulative

16.3. Key literature references and sources for data

No data available

16.4. Procedure used to derive the classification according to regulation (EC) n°1272/2008 (CLP)

Classification of the mixture is in accordance with the evaluation method according to Directive 1272/2008 / EC.

16.5. List of relevant hazard statements and/or precautionary statements. (Full text of any statements which are not written out in full under section 2 to 15)

Hazard statements (H):
H314: Causes severe skin burns and eye damage.

16.6. Advice on any training appropriate for workers to ensure protection of human health and the environment

No data available

The information given in this Safety Data Sheet is based on our present knowledge and on European and national regulations. This Safety Data Sheet describes safety requirements relative to identified uses, it doesn't guarantee all the product properties particularly in the case of non identified uses. The product mustn't be used for any uses other than those identified under heading 1. Since the user's working conditions are not known by us, it is the responsibility of the user to take all necessary measures to comply with legal requirements for specific uses and avoid negative health effects.