



Part Number C80-881  
Version Number: 01  
Revision Date: 05/04/2015

# Cell Solution

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## SECTION 1: IDENTIFICATION

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### 1.1 Product Identifier

ARTICLE NUMBER: 01RC1/01RC3 EN

### 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.

Application of the substance/the mixture Periodical cleaning of ceramic and chromium rolls

### 1.3 Details of the Supplier of the Safety Data Sheet

SUPPLIER: Harris & Bruno International  
ADDRESS: 8555 Washington Blvd.  
TELEPHONE: +33 (0)4 50 92 48 68.  
FAX: +33 (0)4 50 95 54 72.  
EMAIL: [info@recyl.fi](mailto:info@recyl.fi)  
<http://www.recyl.com>

### 1.4 Emergency Telephone Number

NHS DIRECT: 0845 46 47  
TEXTPHONE: 0845 606 46 47



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

# SECTION 2: HAZARD(S) IDENTIFICATION

## 2.1 Classification of the Substance or Mixture

CLASSIFICATION  
ACCORDING TO  
REGULATION US OSHA &  
HAZ COM 2012:



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

## 2.2 Label elements

LABELING ACCORDING TO  
REGULATION US OSHA &  
HAZ COM 2012:

The product is classified and labeled according to the CLP regulation.

HAZARD PICTOGRAMS GHS05

SIGNAL WORD: Danger

HAZARD-DETERMINING  
COMPONENTS OF  
LABELING: Sodium Hydroxide

HAZARD STATEMENTS: H314 Causes severe skin burns and eye damage.

## 2.3 Precautionary Statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash thoroughly after handling.

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.

P304+ P340 IF INHALED Remove person to fresh air and keep comfortable for breathing.

P363 Wash contaminated clothing before reuse.

P301+P330+ P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.



## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

- P310 Immediately call a POISON CENTER/doctor/...
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.4 Classification System:

NFPA RATINGS (SCALE 0 - 4)



Health = 3  
Fire = 1  
Reactivity = 1

HMIS-RATINGS (SCALE 0 - 4)



Health = 3  
Fire = 1  
Reactivity = 1

### 2.5 Other Hazards

RESULTS OF PBT AND VPVB ASSESSMENT

PBT: Not applicable.  
vPvB: Not applicable.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

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### 3.2 Chemical Characterization: Mixtures





DESCRIPTION: MIXTURE: consisting of the following components.



## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

### DANGEROUS COMPONENTS:

CAS: 112-34-5 EINECS: 203-961-6 Index number: 603-096-00-8 RTECS: KI 9100000	2-(2-butoxyethoxy) ethanol  Eye Irrit. 2, H319	50-100%
CAS: 68002-97-1 NLP: 500-182-6	Alcohols, C10-C16, ethoxylated  Acute Tox. 1, H300;  Eye Dam. 1, H318	10-25%
CAS: 1310-73-2 EINECS: 215-185-5 Index number: 011-002-00-6	sodium hydroxide  Skin Corr. 1A, H314	5-25%

## SECTION 4: FIRST-AID MEASURES

### 4.1 Description of first aid measures

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

Immediately remove any clothing soiled by the product.

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: Call a doctor immediately. Rinse opened eye for several minutes under running water. Then consult a doctor.

AFTER SWALLOWING: Do not induce vomiting; immediately call for medical help. Call a doctor immediately.

### 4.2 Most Important Symptoms and Effects

BOTH ACUTE AND DELAYED: No further relevant information available.

### 4.3 Indication of Any Immediate Medical Attention

SPECIAL TREATMENT  
NEEDED: No further relevant information available.



## **SECTION 5: FIRE-FIGHTING MEASURES**

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### **5.1 Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water spray.  
Fight larger fires with water spray or alcohol resistant foam.

FOR SAFETY REASONS  
UNSUITABLE  
EXTINGUISHING AGENTS: Water with full jet

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

Formation of toxic gases is possible during heating or in case of fire.

IN CASE OF FIRE, THE  
FOLLOWING CAN BE  
RELEASED: Carbon monoxide (CO)  
In certain fire conditions, traces of other toxic gases cannot be excluded.

### **5.3 Advice for firefighters**

PROTECTIVE EQUIPMENT: Mouth respiratory protective device.  
Wear fully protective suit.  
Additional information  
Cool endangered receptacles with water spray.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

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

Wear protective equipment. Keep unprotected persons away.

### **6.2 Environmental precautions**

Dilute with plenty of water.  
Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

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

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

### 6.4 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.

## SECTION 7: HANDLING AND STORAGE

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### 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols.

INFORMATION ABOUT  
PROTECTION AGAINST  
EXPLOSIONS AND FIRES:

No special measures required.

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

STORAGE: Requirements to be met by storerooms and receptacles:

Provide alkali-resistant floor.

Store only in the original receptacle.

INFORMATION ABOUT  
STORAGE IN ONE COMMON  
STORAGE FACILITY:

Not required.

FURTHER INFORMATION  
ABOUT STORAGE  
CONDITIONS:

Protect from heat and direct sunlight.

Store receptacle in a well ventilated area. Keep receptacle tightly sealed.



## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

### 7.3 Specific end use(s)

No further relevant information available.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ADDITIONAL INFORMATION ABOUT DESIGN OF TECHNICAL SYSTEMS: No further data; see item 7.

### 8.1 Control parameters

COMPONENTS WITH LIMIT VALUES THAT REQUIRE MONITORING AT THE WORKPLACE:

112-34-5 2-(2-butoxyethoxy) ethanol (25-50%)	
TLV	Long-term value: 67.5* mg/m <sup>3</sup> , 10* ppm *Inhalable fraction and vapor
1310-73-2 sodium hydroxide (2.5-10%)	
PEL	Long-term value: 2 mg/m <sup>3</sup>
REL	Ceiling limit value: 2 mg/m <sup>3</sup>
TLV	Ceiling limit value: 2 mg/m <sup>3</sup>

ADDITIONAL INFORMATION: The lists that were valid during the creation were used as basis.

### 8.2 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.  
Avoid contact with the eyes and skin.

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 (SDS)

Version Number: 01

Revision Date: 05/04/2015

**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.

Butyl rubber, BR  
Nitrile rubber, NBR  
Rubber gloves

**PENETRATION TIME OF GLOVE MATERIAL** The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

**EYE PROTECTION:**



Tightly sealed goggles

**BODY PROTECTION:**



Protective work clothing



Boots

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### General Information

**APPEARANCE:**

**FORM:** Viscous

**COLOR:** Brown

**ODOR:** Characteristic

**ODOUR THRESHOLD:** Not determined.

**PH-VALUE (4 G/L) AT 20 °C  
(68 °F):** 11.7





## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

### Change in condition

MELTING POINT/MELTING RANGE:	Undetermined
BOILING POINT/BOILING RANGE:	Undetermined.
FLASH POINT:	> 100 °C (> 212 °F)
FLAMMABILITY (SOLID, GASEOUS):	Not applicable.
IGNITION TEMPERATURE:	Not applicable.
DECOMPOSITION TEMPERATURE:	Not determined.
AUTO IGNITING:	Product is not self-igniting.
DANGER OF EXPLOSION:	Product does not present an explosion hazard.

### Explosion limits

LOWER:	Not determined.
UPPER:	Not determined.
VAPOR PRESSURE AT 20 °C (68 °F):	<110 kPa
DENSITY AT 20 °C (68 °F):	1.08 g/cm <sup>3</sup> (9.013 lbs/gal)
RELATIVE DENSITY	Not determined.
VAPOUR DENSITY	Not determined.
EVAPORATION RATE	Not determined.
SOLUBILITY IN /MISCIBILITY WITH WATER:	Fully miscible.
PARTITION COEFFICIENT (N-OCTANOL/WATER):	Not determined.

### Viscosity

DYNAMIC:	Not determined.
KINEMATIC AT 20 °C (68 °F):	90 s (DIN 53211/4)
SOLVENT CONTENT:	0%



## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

VOC CONTENT: 0%

### 9.2 Other information

No further relevant information available.

## SECTION 10: STABILITY AND REACTIVITY

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### 10.1 Reactivity

### 10.2 Chemical stability

THERMAL DECOMPOSITION /  
CONDITIONS TO BE  
AVOIDED: No decomposition if used according to specifications.

### 10.3 Possibility of hazardous reactions

Reacts with various metals.

Reacts with alcohols.

Reacts with acids, alkalis and oxidizing agents.

### 10.4 Conditions to avoid

No further relevant information available.

### 10.5 Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

Carbon monoxide and carbon dioxide



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

ACUTE TOXICITY: LD/LC50 values that are relevant for classification:

112-34-5 2-(2-butoxyethoxy) ethanol		
Oral	LD50	5660 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rabbit)
1310-73-2 sodium hydroxide		
Oral	LD50	2000 mg/kg (rat)
68002-97-1 Alcohols, C10-C16, ethoxylated		
Oral	LD50	>4000 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rat)

### Primary irritant effect:

ON THE SKIN: Strong caustic effect on skin and mucous membranes.

ON THE EYE: Strong caustic effect.

SENSITIZATION: No sensitizing effects known.

ADDITIONAL TOXICOLOGICAL INFORMATION: The product shows the following dangers according to internally approved calculation methods for preparations:

CORROSIVE Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

### Carcinogenic categories

L4RC (INTERNATIONAL AGENCY FOR RESEARCH ON CANCER) None of the ingredients is listed.

NTP (NATIONAL TOXICOLOGY PROGRAM) None of the ingredients is listed.



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

# SECTION 12: ECOLOGICAL INFORMATION

## 12.1 Toxicity

AQUATIC TOXICITY:

68002-97-1 Alcohols, C10-C16, ethoxylated	
EC50 72h	0.1-1 mg/l (Algae)
LC50 96h	0.1-1 mg/l (fish)

## 12.2 Persistence and degradability

No further relevant information available.

## 12.3 Bioaccumulative potential

No further relevant information available.

## 12.4 Mobility in soil

No further relevant information available.

## Additional ecological information:

GENERAL NOTES: Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. A high pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably reduced, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

Water hazard class 3 (Self-assessment): extremely hazardous for water. Do not allow product to reach ground water, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground.

## 12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

VPVB: Not applicable.



## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

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

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

RECOMMENDATION: Can be disposed of with household garbage with prior chemical-physical or biological treatment following consultation with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

### Uncleaned packagings:

RECOMMENDATION: Disposal must be made according to official regulations.

RECOMMENDED CLEANSING AGENT: Water, if necessary with cleansing agents.

## SECTION 14: TRANSPORT INFORMATION

### 14.1 UN-Number

ADR, IMDG, DATA UM 760

### 14.2 UN proper shipping name

ADR 1760 Corrosive liquids, n.o.s. (Sodium hydroxide)

IMDG, IATA Corrosive Liquid, N.O.S. (SODIUM HYDROXIDE)

### 14.3 Transport hazard class(es)

LABEL 8

ADR





## Safety Data Sheet (SDS)

Version Number: 01  
Revision Date: 05/04/2015

CLASS 8 (C9) Corrosive substances

LABEL 8

IMDG, IATA



CLASS 8 Corrosive substances.

LABEL 8

### 14.4 Packing group

ADR, IMDG, IATA II

### 14.5 Environmental hazards

MARINE POLLUTANT: No

### 14.6 Special precautions for user

Warning: Corrosive substances

DANGER CODE (BERNIER): 80

EMS NUMBER: F-A,S-B

SEGREGATION GROUPS Alkalis

### 14.7 Transport in bulk according to Annex II of

MARPOL73/78 AND THE IBC CODE Not applicable.

TRANSPORT/ADDITIONAL INFORMATION: ADR: Department of Transportation (DOT)

UN "MODEL REGULATION": UN1760, Corrosive liquids, n.o.s. (Sodium hydroxide), 8, II rice



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

# SECTION 15: REGULATORY INFORMATION

## 15.1 Safety, Health and Environmental Regulations/legislation Specific for the Substance or Mixture (Sara)

SECTION 355 (EXTREMELY HAZARDOUS SUBSTANCES): None of the ingredient is listed.

SECTION 313 (SPECIFIC TOXIC CHEMICAL LISTINGS): None of the ingredients is listed.

TSCA (TOXIC SUBSTANCES CONTROL ACT): All ingredients are listed.

### Proposition 65

CHEMICALS KNOWN TO CAUSE CANCER: None of the ingredients is listed.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY FOR FEMALES: None of the ingredients is listed.

CHEMICALS KNOWN TO CAUSE REPRODUCTIVE TOXICITY FOR MALES: None of the ingredients is listed.

CHEMICALS KNOWN TO CAUSE DEVELOPMENTAL TOXICITY: None of the ingredients is listed.

### Carcinogenicity categories

EPA (ENVIRONMENTAL PROTECTION AGENCY) None of the ingredients is listed.

TLV (THRESHOLD LIMIT VALUE ESTABLISHED BY ACGIH) None of the ingredients is listed.

NIOSH-CA (NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH) None of the ingredients is listed.

OSHA-CA (OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION) None of the ingredients is listed.



## Safety Data Sheet (SDS)

Version Number: 01

Revision Date: 05/04/2015

### 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

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This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

### Abbreviations and acronyms:

ADR	Accord europeen 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
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
ACGIH	American Conference of Governmental Industrial Hygienists
EINECS	European Inventory of Existing Commercial Chemical Substance s
ELINCS	European List of Notified Chemical Substances
CAS	Chemical Abstracts Service (division of the American Chemical Society)
NFPA	National Fire Protection Association (USA)
HMIS	Hazardous Materials Identification System (USA)
VOC	Volatile Organic Compounds (USA, EU)
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent