SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II (453/2010) - Europe

Solid Hero

Version : 2

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

1.1 Product identifier

Product name : Solid Hero

Product code : 102547E

Product use : Machine Warewashing Detergent

Product is for professional use only

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

Identified uses
Dishwash and rinse aid product; Automatic process

Uses advised against
None known.

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Distributor/ Importer : Ecolab Ltd.
David Murray John Building
UK-SN1 1NH Swindon, Wiltshire
England
Tel +44 (0)1793 511221
Fax +44 (0)1793 618552
CCS@ecolab.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : 0870 600 6266 (This service is only available to health professionals)

Manufacturer/ Distributor/ Importer

Telephone number : 01793 511221
Food & Beverage, Institutional, Agri - 01793 548888
Healthcare Leeds - 0113 2322480
Healthcare Swansea - 01252 717616

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Corr. 1A, H314
Aquatic Chronic 2, H411

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : C; R35
R31
N; R51/53

Human health hazards : Causes severe burns. Contact with acids liberates toxic gas.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

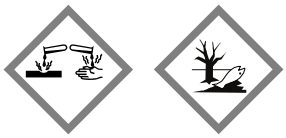
See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

SECTION 2: Hazards identification

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Contains : Sodium hydroxide

Hazard statements : H314 Causes severe skin burns and eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : P273 - Avoid release to the environment.
P280 - Wear protective gloves and eye/face protection.

Response : P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or 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 doctor/physician.

Supplemental label elements : EUH031 - Contact with acids liberates toxic gas.

2.3 Other hazards

Other hazards which do not result in classification : Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Classification 67/548/EEC	Classification Regulation (EC) No. 1272/2008 [CLP]	Type
Sodium hydroxide	REACH #: 01-2119457892-27 EC: 215-185-5 CAS: 1310-73-2 Index: 011-002-00-6	35 - <50	C; R35	Skin Corr. 1A, H314	[1] [2]
Troclosene sodium, dihydrate	REACH #: 01-2119489371-33 EC: 220-767-7 CAS: 51580-86-0 Index: 613-030-00-X	2.5 - <10	E; R2 O; R8 Xn; R22 Xi; R36/37 R31 N; R50/53	Ox. Sol. 2, H272 Acute Tox. 4, H302 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
solvents /additives	EC: 200-334-9 CAS: 57-50-1	1 - <5	Not classified.	Not classified.	[2]
Alcohol ethoxylate	CAS: 111905-53-4	1 - <5	Xi; R36/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
			See Section 16 for the full text of the R-phrases declared above.	**See Section 16 for the full text of the H statements declared above.**	

SECTION 3: Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Get medical attention immediately. Call a poison center or physician.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 15 minutes. Chemical burns must be treated promptly by a physician. Wash contaminated clothing before reusing. Clean shoes thoroughly before reuse. Get medical attention immediately. Call a poison center or physician.

Ingestion : Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately. Call a poison center or physician.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Skin contact : Causes severe burns.

Ingestion : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

SECTION 4: First aid measures

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Specific treatments : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water spray (fog), foam, dry chemical, or CO_2.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds
metal oxide/oxides

5.3 Advice for firefighters

Special precautions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Try to avoid touching or walking through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and materials for containment and cleaning up

Small spill: : Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container.

Large spill : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Spillages should be cleaned up promptly to avoid damage to surrounding materials. Never add concentrated product to warm or hot solutions! Risk of exothermic reaction!

Advice on general occupational hygiene : Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities : Store between the following temperatures: 10 to 30°C (50 to 86°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not applicable until Exposure Scenarios for substances become available.

Industrial sector specific solutions : Not applicable until Exposure Scenarios for substances become available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Sodium hydroxide	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 2 mg/m³ 15 minutes.
solvents /additives	**EH40/2005 WELs (United Kingdom (UK), 12/2011).** STEL: 20 mg/m³ 15 minutes. TWA: 10 mg/m³ 8 hours.

Derived effect levels

No DNELs available for the mixture.

Predicted effect concentrations

No PNECs available for the mixture.

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection (EN 166) : Highly recommended : Goggles, face shield, or other full-face protection.

Skin protection

Hand protection (EN 374) : Highly recommended : Gloves - butyl rubber , nitrile rubber (Breakthrough time: 1 - 4 hours) .

Body protection (EN 14605) : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection (EN 143, 14387) : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Thermal hazards : Not applicable.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	Solid
Colour	:	White
Odour	:	Odourless
Odour threshold	:	Not applicable and/or not determined for the mixture.
pH	:	12.4 to 12.8 [Conc. (% w/w): 1%]
Melting point/freezing point	:	Not applicable and/or not determined for the mixture.
Initial boiling point and boiling range	:	Not applicable and/or not determined for the mixture.
Flash point	:	> 100°C
Evaporation rate	:	Not applicable and/or not determined for the mixture.
Flammability (solid, gas)	:	Not applicable and/or not determined for the mixture.
Burning time	:	Not applicable and/or not determined for the mixture.
Burning rate	:	Not applicable and/or not determined for the mixture.
Upper/lower flammability or explosive limits	:	Not applicable and/or not determined for the mixture.
Vapour pressure	:	Not applicable and/or not determined for the mixture.
Vapour density	:	Not applicable and/or not determined for the mixture.
Relative density	:	1.6 to 1.65
Solubility(ies)	:	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not applicable and/or not determined for the mixture.
Auto-ignition temperature	:	Not applicable and/or not determined for the mixture.
Decomposition temperature	:	Not applicable and/or not determined for the mixture.
Viscosity	:	Not applicable and/or not determined for the mixture.
Explosive properties	:	Not applicable.
Oxidising properties	:	Yes.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	:	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:	The product is stable.
10.3 Possibility of hazardous reactions	:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:	No specific data.
10.5 Incompatible materials	:	Extremely reactive or incompatible with the following materials: acids.
10.6 Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Troclosene sodium, dihydrate	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	1823 mg/kg	-
Alcohol ethoxylate	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-

Conclusion/Summary : No known significant effects or critical hazards.

Acute toxicity estimates

Route	ATE value
Oral	59760.1 mg/kg

Irritation/Corrosion

Conclusion/Summary : No known significant effects or critical hazards.

Sensitiser

Conclusion/Summary : No known significant effects or critical hazards.

Mutagenicity

Conclusion/Summary : No known significant effects or critical hazards.

Carcinogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Reproductive toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Teratogenicity

Conclusion/Summary : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Troclosene sodium, dihydrate	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

No known significant effects or critical hazards.

Aspiration hazard

No known significant effects or critical hazards.

Information on the likely routes of exposure : No known significant effects or critical hazards.

Potential acute health effects

Inhalation : May give off gas, vapour or dust that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion : Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

Skin contact : Causes severe burns.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

SECTION 11: Toxicological information

Ingestion : Adverse symptoms may include the following:
stomach pains

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

Conclusion/Summary : No known significant effects or critical hazards.

General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Other information : No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Sodium hydroxide	Acute EC50 40 mg/l	Daphnia	48 hours
Troclosene sodium, dihydrate	Acute EC50 0.196 mg/l	Daphnia	48 hours
Alcohol ethoxylate	Acute LC50 5 mg/l	Fish	96 hours

Conclusion/Summary : No known significant effects or critical hazards.

12.2 Persistence and degradability

Conclusion/Summary : The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC

12.3 Bioaccumulative potential

Conclusion/Summary : Not determined for the mixture.

12.4 Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not determined for the mixture.

Mobility : Not determined for the mixture.

SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
20 01 15*	alkalines

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN/ADNR	IMDG	IATA
14.1 UN number	UN3262	UN3262	UN3262	UN3262
14.2 UN proper shipping name	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide)	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (Troclosene sodium, dihydrate, Sodium hydroxide). Marine pollutant	Corrosive solid, basic, inorganic, n.o.s. (Troclosene sodium, dihydrate, Sodium hydroxide)
14.3 Transport hazard class(es)	8 	8 	8 	8 

SECTION 14: Transport information

14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.
14.6 Special precautions for user	None.	None.	None.	None.

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable.

Other EU regulations

Ingredient declaration according to detergent regulation 648/2004/EC:

≥ 30% phosphates
<5% anionic surfactants, non-ionic surfactants, polycarboxylates, chlorine-based bleaching agents

National regulations

United Kingdom (UK)

The Chemicals (Hazard Information and Packaging for Supply) Regulations.
The Control of Substances Hazardous to Health Regulations.
Health and Safety at Work Act.

15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

◤ Indicates information that has changed from previously issued version.

SECTION 16: Other information

Abbreviations and acronyms : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
DPD = Dangerous Preparations Directive [1999/45/EC]
EC = European Commission
EUH statement = CLP-specific Hazard statement
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OEL = Occupational Exposure Limit
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
REACH # = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1A, H314	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements :	H272	May intensify fire; oxidiser.
	H302	Harmful if swallowed.
	H314	Causes severe skin burns and eye damage.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
	H335	May cause respiratory irritation.
	H400	Very toxic to aquatic life.
	H410	Very toxic to aquatic life with long lasting effects.
	H411	Toxic to aquatic life with long lasting effects.
Full text of classifications [CLP/GHS] :	Acute Tox. 4, H302	ACUTE TOXICITY: ORAL - Category 4
	Aquatic Acute 1, H400	AQUATIC TOXICITY (ACUTE) - Category 1
	Aquatic Chronic 1, H410	AQUATIC TOXICITY (CHRONIC) - Category 1
	Aquatic Chronic 2, H411	AQUATIC TOXICITY (CHRONIC) - Category 2
	Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
	Ox. Sol. 2, H272	OXIDIZING SOLIDS - Category 2
	Skin Corr. 1A, H314	SKIN CORROSION/IRRITATION - Category 1A
	Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
	STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

SECTION 16: Other information

Full text of abbreviated R phrases	:	R2- Risk of explosion by shock, friction, fire or other sources of ignition. R8- Contact with combustible material may cause fire. R22- Harmful if swallowed. R35- Causes severe burns. R36/37- Irritating to eyes and respiratory system. R36/38- Irritating to eyes and skin. R31- Contact with acids liberates toxic gas. R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Full text of classifications [DSD/DPD]	:	E - Explosive O - Oxidising C - Corrosive Xn - Harmful Xi - Irritant N - Dangerous for the environment
Date of printing	:	5 December 2013
Date of issue/ Date of revision	:	5 December 2013
Date of previous issue	:	No previous validation
Version	:	2

Notice to reader

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