# Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product identifier

Product name : AQUANOMIC SOLID OXY

Product code : 116101E

Use of the : Laundry product

Substance/Mixture

Substance type: : Mixture

For professional users only.

Product dilution information : 0.02 % - 0.05 %

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

Identified uses : Laundry aid (non-gasing). Automatic process

Recommended restrictions

on use

: Reserved for industrial and professional use.

# 1.3 Details of the supplier of the safety data sheet

Company : Ecolab Ltd.

PO Box 11; Winnington Avenue

Northwich, Cheshire, United Kingdom CW8 4DX

+ 44 (0)1606 74488 ccs@ecolab.com

## 1.4 Emergency telephone number

Emergency telephone : +441618841235

number +32-(0)3-575-5555 Trans-European

Date of Compilation/Revision : 23.07.2018

Version : 1.4

# **Section: 2. HAZARDS IDENTIFICATION**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

**Product AS SOLD** 

Eye irritation, Category 2 H319

# **Product AT USE DILUTION**

Not a hazardous substance or mixture.

#### 2.2 Label elements

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# Labelling (REGULATION (EC) No 1272/2008)

Product AS SOLD

Hazard pictograms :



Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:** 

P280e Wear eye protection/face protection.

#### **Product AT USE DILUTION**

Not a hazardous substance or mixture.

## 2.3 Other hazards

## **Product AS SOLD**

None known.

# Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

# Product AS SOLD Hazardous components

Chemical Name	CAS-No.	Classification	Concentration:
	EC-No.	REGULATION (EC) No 1272/2008	[%]
	REACH No.	,	
Sodium Carbonate	497-19-8	Eye irritation Category 2; H319	>= 30 - < 50
	207-838-8		
	01-2119485498-19		
Sodium carbonate	15630-89-4	Oxidizing solids Category 3; H272	>= 30 - < 50
peroxyhydrate	239-707-6	Acute toxicity Category 4; H302	
	01-2119457268-30	Serious eye damage Category 1; H318	
alcohols, c12-16,	68551-12-2	Acute toxicity Category 4; H302	>= 2.5 - < 3
ethoxylated		Skin irritation Category 2; H315	
		Serious eye damage Category 1; H318	

## **Product AT USE DILUTION**

Remarks : No hazardous ingredients

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

**Product AS SOLD** 

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for

at least 15 minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Get medical attention.

In case of skin contact : Rinse with plenty of water.

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If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

**Product AT USE DILUTION** 

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

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

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

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

Treatment : Treat symptomatically.

# **Section: 5. FIREFIGHTING MEASURES**

#### **Product AS SOLD**

## 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

## 5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Not flammable or combustible.

Hazardous combustion

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides

nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

## 5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be

disposed of in accordance with local regulations. In the event of

fire and/or explosion do not breathe fumes.

# Section: 6. ACCIDENTAL RELEASE MEASURES

# 6.1 Personal precautions, protective equipment and emergency procedures

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**Product AS SOLD** 

Advice for non-emergency

personnel

: Ensure clean-up is conducted by trained personnel only. Refer to

protective measures listed in sections 7 and 8.

Advice 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.

**Product AT USE DILUTION** 

Advice for non-emergency

personnel

Advice for emergency

responders

: Refer to protective measures listed in sections 7 and 8.

: If specialised clothing is required to deal with the spillage, take

note of any information in Section 8 on suitable and unsuitable materials.

6.2 Environmental precautions

**Product AS SOLD** 

Environmental precautions : Do not allow contact with soil, surface or ground water.

**Product AT USE DILUTION** 

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

**Product AS SOLD** 

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal.

**Product AT USE DILUTION** 

Methods for cleaning up

: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a

waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

**Product AS SOLD** 

Advice on safe handling : Avoid contact with skin and eyes. Use only with adequate

ventilation. Wash hands thoroughly after handling.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use.
Wash face, hands and any exposed skin thoroughly after

handling.

**Product AT USE DILUTION** 

Advice on safe handling : Wash hands after handling. For personal protection see section 8.

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Hygiene measures : Wash hands before breaks and immediately after handling the

product.

# 7.2 Conditions for safe storage, including any incompatibilities

**Product AS SOLD** 

Requirements for storage areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

Storage temperature : 0 °C to 40 °C

**Product AT USE DILUTION** 

Requirements for storage areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

# 7.3 Specific end uses

**Product AS SOLD** 

# Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

## **Product AS SOLD**

Contains no substances with occupational exposure limit values.

## **DNEL**

Sodium Carbonate	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 10 mg/m3  End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 10 mg/m3
disodium metasilicate	:	End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 1.49 mg/kg  End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 6.22 mg/m3

## **PNEC**

disodium metasilicate	:	.   Fresh water	
		Value: 7.5 mg/l	
		Marine water Value: 1 mg/l	
		Intermittent use/release	

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Value: 7.5 mg/l

Sewage treatment plant Value: 1000 mg/l

#### 8.2 Exposure controls

# Product AS SOLD Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use.

Wash face, hands and any exposed skin thoroughly after

handling.

Eye/face protection (EN 166) : Safety glasses with side-shields

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:B

# Product AT USE DILUTION Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands before breaks and immediately after handling the

product.

Eye/face protection (EN

166)

: No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: None required if airborne concentrations are maintained below the

exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by

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technical means of collective protection or by measures, methods or procedures of work organization.

### **Environmental exposure controls**

General advice : Consider the provision of containment around storage vessels.

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

# 9.1 Information on basic physical and chemical properties

Product AS SOLD Product AT USE DILUTION

Appearance : Solid form liquid
Colour : white colourless
Odour : odourless odourless
pH : 10.2 - 11.2, 1 % 9.5 - 10.5

Flash point : Not applicable.

Odour Threshold : Not applicable and/or not determined for the mixture

Melting point/freezing point : Not applicable and/or not determined for the mixture

Initial boiling point and

boiling range

: > 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 Upper explosion limit : Not applicable and/or not determined for the mixture Lower explosion limit : Not applicable and/or not determined for the mixture Vapour pressure : Not applicable and/or not determined for the mixture Relative vapour density : Not applicable and/or not determined for the mixture Relative density : Not applicable and/or not determined for the mixture

Water solubility : soluble

Solubility in other solvents : Not applicable and/or not determined for the mixture Partition coefficient: n- : Not applicable and/or not determined for the mixture octanol/water

Auto-ignition temperature : Not applicable and/or not determined for the mixture
Thermal decomposition : Not applicable and/or not determined for the mixture
Viscosity, kinematic : Not applicable and/or not determined for the mixture
Explosive properties : Not applicable and/or not determined for the mixture
Oxidizing properties : Not applicable and/or not determined for the mixture

# 9.2 Other information

Not applicable and/or not determined for the mixture

# Section: 10. STABILITY AND REACTIVITY

#### **Product AS SOLD**

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#### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

# 10.2 Chemical stability

Stable under normal conditions.

## 10.3 Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4 Conditions to avoid

None known.

## 10.5 Incompatible materials

**Bases** 

Organic materials

Acids

#### 10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials:

Carbon oxides

nitrogen oxides (NOx)

Sulphur oxides

Oxides of phosphorus

# **Section: 11. TOXICOLOGICAL INFORMATION**

## 11.1 Information on toxicological effects

**Product AS SOLD** 

Information on likely routes of : Eye contact, Skin contact

exposure

**Product** 

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

: There is no data available for this product. Skin corrosion/irritation

Serious eye damage/eye

irritation

: Eye irritation

Respiratory or skin

sensitization

: There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

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Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

Acute oral toxicity : Sodium Carbonate

LD50 rat: 2,800 mg/kg

Sodium carbonate peroxyhydrate

LD50 rat: 1,034 mg/kg

alcohols, c12-16, ethoxylated

LD50 rat: 1,100 mg/kg

Components

Acute dermal toxicity : alcohols, c12-16, ethoxylated

LD50 rabbit: > 2,000 mg/kg

**Potential Health Effects** 

**Product AS SOLD** 

Eyes : Causes serious eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

**Product AT USE DILUTION** 

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

**Experience with human exposure** 

**Product AS SOLD** 

Eye contact : Redness, Pain, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

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Inhalation : No symptoms known or expected.

**Product AT USE DILUTION** 

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

: No symptoms known or expected. Ingestion

Inhalation : No symptoms known or expected.

## Section: 12. ECOLOGICAL INFORMATION

# **Product AS SOLD** 12.1 Ecotoxicity

**Environmental Effects** : This product has no known ecotoxicological effects.

**Product** 

Toxicity to fish : no data available Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Components

Toxicity to fish : Sodium Carbonate

96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l

alcohols, c12-16, ethoxylated

LC50: 1.5 mg/l

Components

Toxicity to daphnia and other : Sodium Carbonate

aquatic invertebrates

48 h EC50 Ceriodaphnia (water flea): 213.5 mg/l

Sodium carbonate peroxyhydrate 48 h EC50 Daphnia: 4.9 mg/l

## 12.2 Persistence and degradability

**Product** 

Biodegradability : The surfactants contained in the product are biodegradable

according to the requirements of the detergent regulation

648/2004/EC

Components

Biodegradability : Sodium Carbonate

Result: Not applicable - inorganic

Sodium carbonate peroxyhydrate Result: Not applicable - inorganic

alcohols, c12-16, ethoxylated Result: Readily biodegradable.

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#### 12.3 Bioaccumulative potential

no data available

# 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

#### **Product**

Assessment : This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

#### 12.6 Other adverse effects

no data available

## **Section: 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

#### 13.1 Waste treatment methods

## **Product AS SOLD**

Product : Where possible recycling is preferred to disposal or incineration. If

recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal

facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken

to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local,

state, and federal regulations.

Guidance for Waste Code

selection

: Inorganic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and

assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable European (EU Directive 2008/98/EC)

and local regulations.

**Product AT USE DILUTION** 

Product : Diluted product can be flushed to sanitary sewer.

Contaminated packaging : Dispose of in accordance with local, state, and federal regulations.

## Section: 14. TRANSPORT INFORMATION

#### **Product AS SOLD**

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The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

# Land transport (ADR/ADN/RID)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot dangerous goods

user

## Air transport (IATA)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot dangerous goods

user

# Sea transport (IMDG/IMO)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for
Not dangerous goods
Not dangerous goods

user

14.7 Transport in bulk : Not dangerous goods according to Annex II of

MARPOL 73/78 and the IBC Code

# **Section: 15. REGULATORY INFORMATION**

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

according to Detergents : 30 % and more: Oxygen-based bleaching agents
Regulation EC 648/2004 less than 5 %: Non-ionic surfactants, Polycarboxylates

#### **National Regulations**

#### Take note of Dir 94/33/EC on the protection of young people at work.

Other regulations : The Chemicals (Hazard Information and Packaging for Supply)

Regulations.

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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**

### Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Eye irritation 2, H319	Based on product data or assessment

#### **Full text of H-Statements**

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

#### Full text of other abbreviations

ADN – European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR – European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS – Australian Inventory of Chemical Substances; ASTM – American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL -Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number -European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx – Concentration associated with x% growth rate response; GHS - Globally Harmonized System: GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC -International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 -Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC No Observed (Adverse) Effect Concentration; NO(A)EL – No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID – Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance Inventory; TRGS – Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB -Very Persistent and Very Bioaccumulative

#### **Further information**

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Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

### **Annex: Exposure Scenarios**

### Exposure Scenario: Laundry aid (non-gasing). Automatic process

Life Cycle Stage : Use at industrial sites

Product category : **PC35** Washing and cleaning products (including solvent based

products)

## Contributing scenario controlling environmental exposure for:

Environmental release

category

: **ERC4** 

Industrial use of processing aids in processes and

products, not becoming part of articles

Daily amount per site : 50 kg

Type of Sewage Treatment

Plant

: Municipal sewage treatment plant

## Contributing scenario controlling worker exposure for:

Process category : **PROC8b** Transfer of substance or preparation (charging/

discharging) from/ to vessels/ large containers at

dedicated facilities

Exposure duration : 60 min

Operational conditions and risk management measures

: Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : Yes: See Section 8

Respiratory Protection : No

#### Contributing scenario controlling worker exposure for:

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: PROC2 Use in closed, continuous process with occasional Process category

controlled exposure

Exposure duration 480 min

Operational conditions and

risk management measures

: Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection

Respiratory Protection : No

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