

**NALCO CL-37**

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

**1.1 Product identifier:** **NALCO CL-37**  
Substance type: CLP Mixture

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

Use of the Substance/Mixture : ANTIFOAM  
Identified uses : Waste water treatment  
Recommended restrictions on use : Reserved for industrial and professional use.

**1.3 Details of the supplier of the safety data sheet:**

Company : Nalco Ltd.  
P.O. BOX 11, WINNINGTON AVENUE  
NORTHWICH, CHESHIRE, U.K. CW8 4DX  
+44 (0)1606 74488  
For Product Safety information please contact:  
msdseame@nalco.com

**1.4 Emergency telephone number:**

Emergency telephone number : +44 1618841235  
+32-(0)3-575-5555 Trans-European

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**Section: 2. HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

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

Not a hazardous substance or mixture.

**2.2 Label elements**

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

Not a hazardous substance or mixture.

Precautionary Statements : **Prevention:**  
P264 Wash hands thoroughly after handling.  
**Response:**  
P314 Get medical advice/ attention if you feel unwell.  
**Storage:**  
P401 Store in accordance with local regulations.

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Special labelling of certain mixtures : Safety data sheet available on request.

Contains: A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) May produce an allergic reaction.

**2.3 Other hazards**

None known.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures****Hazardous components**

Chemical Name	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9 01-2120764691-48	Acute toxicity Category 3; H301 Acute toxicity Category 2; H330 Acute toxicity Category 2; H310 Skin corrosion Sub-category 1C; H314 Serious eye damage Category 1; H318 Skin sensitization Category 1A; H317 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410  Skin corrosion Category 1C H314 >= 0.6 % Skin irritation Category 2 H315 0.06 - < 0.6 % Eye irritation Category 2 H319 0.06 - < 0.6 % Skin sensitization Category 1A H317 >= 0.0015 % Serious eye damage Category 1 H318 >= 0.6 % M = 100 M(Chronic) = 100	0.0002 - < 0.0015

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**

- If inhaled : Get medical attention if symptoms occur.
- In case of skin contact : Wash off with soap and plenty of water.  
Get medical attention if symptoms occur.
- In case of eye contact : Rinse with plenty of water.  
Get medical attention if symptoms occur.
- If swallowed : Rinse mouth.  
Get medical attention if symptoms occur.
- Protection of first-aiders : In event of emergency assess the danger before taking action.  
Do not put yourself at risk of injury. If in doubt, contact emergency responders. Use personal protective equipment as required.

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**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 : No specific measures identified.

**Section: 5. FIREFIGHTING MEASURES**

**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 : Decomposition products may include the following materials:  
Carbon oxides

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

**Section: 6. ACCIDENTAL RELEASE MEASURES**

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

Advice for non-emergency personnel : 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.

**6.2 Environmental precautions**

Environmental precautions : No special environmental precautions required.

**6.3 Methods and materials for containment and cleaning up**

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**

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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**

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

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

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

Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labelled containers.

Suitable material : The following compatibility data is suggested based on similar product data and/or industry experience: HDPE (high density polyethylene), Stainless Steel 304, Compatibility with Plastic Materials can vary; we therefore recommend that compatibility is tested prior to use.

**7.3 Specific end uses**

Specific use(s) : ANTIFOAM

**Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Appropriate engineering controls**

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) : Safety glasses

Hand protection (EN 374) : Recommended preventive skin protection  
Gloves  
Nitrile rubber  
butyl-rubber  
Breakthrough time: 1 – 4 hours  
Minimum thickness for butyl-rubber 0.3 mm for nitrile rubber 0.2 mm or equivalent (please refer to the gloves manufacturer/distributor for advise).  
Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

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Skin and body protection (EN 14605) : Wear suitable protective clothing.

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: A-P

The Personal Protective Equipment (PPE) recommendations provided above have been made in good faith based on typical expected conditions of use. PPE selection should always be completed in conjunction with a proper risk assessment and in accordance with a PPE management program.

**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**

Appearance : Liquid

Colour : Milky  
White

Odour : Mild

Flash point : does not flash

pH : 6.7, 100 %  
(25 °C)

Odour Threshold : no data available

Melting point/freezing point : Freezing Point: 0 °C

Initial boiling point and boiling range : > 100 °C

Evaporation rate : no data available

Flammability (solid, gas) : no data available

Upper explosion limit : no data available

Lower explosion limit : no data available

Vapour pressure : < 20 mm Hg (68 °C)

Relative vapour density : no data available

Relative density : 0.98 (25 °C)

Solubility(ies)

Water solubility : dispersible

Solubility in other solvents : no data available

Partition coefficient: n-octanol/water : no data available

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Auto-ignition temperature : no data available

Thermal decomposition : no data available

Viscosity

Viscosity, dynamic : 1,500 - 2,900 mPa.s (25 °C)

Viscosity, kinematic : no data available

Explosive properties : no data available

Oxidizing properties : no data available

**9.2 Other information**

no data available

**Section: 10. STABILITY AND REACTIVITY**

**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**

Hazardous reactions : No dangerous reaction known under conditions of normal use.

**10.4 Conditions to avoid**

Conditions to avoid : Avoid extremes of temperature.

**10.5 Incompatible materials**

Materials to avoid : Contact with strong oxidizers (e.g. chlorine, peroxides, chromates, nitric acid, perchlorate, concentrated oxygen, permanganate) may generate heat, fires, explosions and/or toxic vapors.

**10.6 Hazardous decomposition products**

Hazardous decomposition products : Decomposition products may include the following materials:  
Carbon oxides

**Section: 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Inhalation, Eye contact, Skin contact

**Toxicity**

**Product**

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Acute oral toxicity	: LD50 rat: > 56,000 mg/kg Test substance: Product
Acute inhalation toxicity	: There is no data available for this product.
Acute dermal toxicity	: LD50 rabbit: > 20,000 mg/kg Test substance: Product
Skin corrosion/irritation	: There is no data available for this product.
Serious eye damage/eye irritation	: There is no data available for this product.
Respiratory or skin sensitization	: There is no data available for this product.
Carcinogenicity	: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive effects	: No toxicity to reproduction
Germ cell mutagenicity	: Contains no ingredient listed as a mutagen
Teratogenicity	: There is no data available for this product.
STOT - single exposure	: Based on available data, the classification criteria are not met.
STOT - repeated exposure	: There is no data available for this product.
Aspiration toxicity	: No aspiration toxicity classification

**Components**

Acute oral toxicity	: A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) LD50 rat: 64 mg/kg
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**Components**

Acute inhalation toxicity	: A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) LC50 rat: 0.33 mg/l Exposure time: 4 h Test atmosphere: dust/mist
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**Components**

Acute dermal toxicity	: A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1) LD50 rabbit: 87.12 mg/kg
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**Potential Health Effects**

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.

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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**

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

**Further information** : no data available

**Section: 12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

**Product**

Environmental Effects : This product has no known ecotoxicological effects.

Toxicity to fish : 96 hrs LC50 Gold Orfe: > 200 mg/l

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

**Components**

Toxicity to fish : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
96 h LC50 Oncorhynchus mykiss (rainbow trout): 0.19 mg/l

**Components**

Toxicity to daphnia and other aquatic invertebrates : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
48 h LC50 Daphnia magna (Water flea): 0.16 mg/l

**Components**

Toxicity to algae : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
72 h LC50 Skeletonema costatum (marine diatom): 0.037 mg/l

**Components**

Toxicity to fish (Chronic toxicity) : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
72 d NOEC Oncorhynchus mykiss (rainbow trout): 0.098 mg/l

**Components**



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Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
21 d NOEC Daphnia magna (Water flea): 0.004 mg/l

**12.2 Persistence and degradability**

**Product**

Biodegradability : The organic portion of this preparation is expected to be readily biodegradable.

**Components**

Biodegradability : A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)  
Result: Biodegradable

**12.3 Bioaccumulative potential**

**Product**

Bioaccumulation : This preparation or material is not expected to bioaccumulate.

**12.4 Mobility in soil**

**Product**

The portion in water is expected to be soluble or dispersible.

**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 adverse effects expected.

**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 : Where possible recycling is preferred to disposal or incineration.  
If recycling is not practicable, dispose of contents/container in accordance 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.

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Guidance for Waste Code selection : Organic wastes containing not dangerous substances with concentration  $\geq 0.1\%$ . 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.

**Section: 14. TRANSPORT INFORMATION**

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 applicable.
14.2 UN proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION
14.3 Transport hazard class(es):	Not applicable.
14.4 Packing group:	Not applicable.
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.

**Air transport (IATA)**

14.1 UN number:	Not applicable.
14.2 UN proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION
14.3 Transport hazard class(es):	Not applicable.
14.4 Packing group:	Not applicable.
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.

**Sea transport (IMDG/IMO)**

14.1 UN number:	Not applicable.
14.2 UN proper shipping name:	PRODUCT IS NOT REGULATED DURING TRANSPORTATION
14.3 Transport hazard class(es):	Not applicable.
14.4 Packing group:	Not applicable.
14.5 Environmental hazards:	No
14.6 Special precautions for user:	Not applicable.
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:**

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable.

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Candidate List of Substances : Not applicable.  
of Very High Concern for  
Authorisation

**INTERNATIONAL CHEMICAL CONTROL LAWS**

**CANADA**

This product contains substance(s) which are found on the Non-Domestic Substances List (NDSL), or are not in compliance with other Canadian Acts.

**United States TSCA Inventory**

The substances in this preparation are included on or exempted from the TSCA 8(b) Inventory (40 CFR 710)

**NATIONAL REGULATIONS GERMANY**

Water contaminating class : WGK 1  
(Germany) Classification according to AwSV, Annex 1

**15.2 Chemical Safety Assessment:**

Chemical Safety Assessments have been carried out for these substances.

**Section: 16. OTHER INFORMATION**

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

Classification	Justification
Not a hazardous substance or mixture.	Calculation method

**Full text of H-Statements**

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

**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; AIIIC - Australian Inventory of Industrial Chemicals; 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 -

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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; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals 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**

Sources of key data used to compile the Safety Data Sheet : IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, Geneva: World Health Organization, International Agency for Research on Cancer.

The possible key literature references and data sources which may have been used in conjunction with the consideration of expert judgment to compile this Safety Data Sheet: European regulations/directives (including (EC) No. 1907/2006, (EC) No. 1272/2008), supplier data, inter-net, ESIS, IUCLID, ERICards, Non European official regulatory data and other data sources.

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: Waste water treatment**

Life Cycle Stage : Industrial uses: Uses of substances as such or in preparations at industrial sites

Sector of use : **SU6b** Manufacture of pulp, paper and paper products  
**SU23** Electricity, steam, gas water supply and sewage treatment

**Contributing scenario controlling environmental exposure for:**

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Environmental release category : **ERC4** Industrial use of processing aids in processes and products, not becoming part of articles

Daily amount per site : 1000 kg

Type of Sewage Treatment Plant : Standard STP

**Contributing scenario controlling worker exposure for:**

Process category : **PROC8a** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities

Exposure duration : 15 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour: 3

Skin Protection : see section 8

Respiratory Protection : see section 8

**Contributing scenario controlling worker exposure for:**

Process category : **PROC4** Use in batch and other process (synthesis) where opportunity for exposure arises

Exposure duration : 60 min

Operational conditions and risk management measures : Outdoor

No

Skin Protection : see section 8

Respiratory Protection : see section 8

**Contributing scenario controlling worker exposure for:**

Process category : **PROC15** Use as laboratory reagent

Exposure duration : 60 min

Operational conditions and risk management measures : Indoor

Local Exhaust Ventilation with 90% efficiency is required

General ventilation Ventilation rate per hour: 3

Skin Protection : see section 8

Respiratory Protection : see section 8

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**Contributing scenario controlling worker exposure for:**

Process category : **PROC28** Manual maintenance (cleaning and repair) of machinery

Exposure duration : 240 min

Operational conditions and risk : Indoor  
management measures

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour: 3

Skin Protection : see section 8

Respiratory Protection : see section 8