According to ISO & SANS 11014:2010 & SANS 10234

Revision Date: 21 November 2015

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Version: 2.0



SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier:

Identification as on the label/Trade name: Scientific™ C31

Additional information: Product Code Siliphos.

Relevant identification uses of the substance and uses advised against:

Identified uses: Formulation additive, corrosion inhibitors, water treatment, water conditioner.

Uses advised against: Anything other than formulation additive, corrosion inhibitor, water treatment and a water conditioner.

Details of the supplier of the Safety Data Sheet:

Arch Water Products South Africa (Pty) Ltd.

(Reg. No. 1972/014058/07)

P O Box 150, Kempton Park, 1620

Situated At: NCP Chloorkop Factory Site

Hytor Street

Chloorkop

Kempton Park, 1619

Emergency telephone numbers:

Poisons Information Centre: 0861 555 777 (24 hours) +27 11 976 2115 (Office hours only)

SECTION 2. HAZARDS IDENTIFICATION

Classification of the substances or mixture:

The product is classified according to:

SANS 10234:2008, Regulation EC 1272/2008 [EU-GHS/CLP1

Hazard classes/Hazard categories

Non hazardous

Hazard statement Not required

For full text of H-Statements see section 16

The most important adverse effects:

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The most important adverse physiochemical effects: None.

The most important adverse human health effects: None.

Label elements:

Hazard pictograms: Not required.

Signal Words: Not required.

Hazard Statements: Not required.

Precautionary Statements: Not required.

Special labelling of certain mixtures: Not required.

Other hazards: None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

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.

Occupational exposure limits, if available listed in Section 8. For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: No special precautions needed.

In case of skin contact: Wash off with soap and plenty of water for at least 15 minutes. In case of discomfort seek medical attention.

In case of eye contact: Flush eyes thoroughly with water for at least 15 minutes, lifting lower and upper eyelids occasionally. Remove contact lenses after the initial 1-2 minutes and continue flushing. In case of discomfort seek medical attention.

In case of ingestion: Do NOT induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. In case of discomfort seek medical attention.

Most important symptoms and effects, both acute and delayed:

Inhalation: None.

Ingestion: None.

Skin Contact: None.

Eye Contact: None.

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Indication of any immediate medical attention and special treatment needed:

No information available.

SECTION 5. FIREFIGHTING MEASURES

Extinguisher media:

Suitable extinguisher media: Use fire- fighting measures that suit the environment. CO2, extinguishing powder or water jet. Fight larger fires with foam.

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture:

Specific hazards during firefighting: None known.

Advice for fire-fighters:

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus. Use water spray to cool unopened containers.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel: Use personal protective clothing. Avoid causing dust. Particular danger of slipping on leaked/spilled product.

For emergency responders: Use personal protective clothing. Avoid causing dust. Particular danger of slipping on leaked/spilled product.

Environmental precautions: Do not allow concentrated solutions to enter drainage system, surface or ground water.

Methods for containment and cleaning up:

For small spills: 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).

For large spills: 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).

Reference to other sections:

For personal protection see section 8.

Additional information:

None known.

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SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Advice on safe handling: No special precautions required. Prevent formation of dust.

Advice on protection against fire and explosion: The product is not flammable. No special measures required.

Advice on general occupational hygiene: Do not smoke. Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep container tightly closed. To maintain product quality, do not store in heat or direct sunlight. Keep in a dry, cool and well-ventilated place.

Storage temperature: 5 - 35 °C

Specific end uses: No information available.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION Control parameters:

Occupational exposure limits: Contains no substances with occupational exposure limit values.

Biological exposure indices (BEI): No data available.

Additional exposure limits under the conditions of use: No data available.

Exposure control:

Individual protection measures, such as personal protective equipment:

Eye/face protection: Use safety glasses. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles.

<u>Hand protection:</u> Not necessary under normal use, if skin irritation occurs use chemical resistant gloves. Examples of preferred glove barrier materials include: Butyl rubber, Neoprene, Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, polyvinyl alcohol, Polyvinyl chloride.

Body protection: Not necessary under normal use.

Respiratory protection: If discomfort is experienced, use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: General advice: Prevent product from entering drains.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Solid.

Colour: Transparent.

Odour: Odourless.

Odour threshold: Not known.

pH: 7

Melting point/range (°C): Not known.

Boiling point/range (°C): 800 °C

Flash point (°C): Not known.

Evaporation rate: Not known.

Flammability (solid, gas): Not known.

Ignition temperature (°C): 1010 °C

Upper/lower flammability/explosive limits: Not known.

Vapour pressure: Not known.

Vapour density: Not known

Relative density (25°C): Settled apparent density at 20 °C: ca. 1300 kg/m3

Water solubility (g/l) at 20°C: Slightly soluble.

n-Octanol/ Water partition coefficient: ca. -2 log POW.

Auto-ignition temperature: Not known.

Decomposition temperature: Not known.

Viscosity, dynamic (mPa s): Not known.

Physical hazards:

None.

Other information:

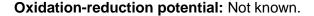
Fat solubility (solvent-oil to be specified): Not known.

Bulk density: Not known.

Dissociation constant in water (p Ka): Not known.

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SECTION 10. STABILITY AND REACTIVITY

Reactivity:

Stable under recommended storage conditions.

Chemical stability:

Stable under normal conditions.

Possibility of hazardous reactions:

Stable under recommended storage conditions.

Conditions to avoid:

No data available.

Incompatible materials:

Strong oxidizing agents.

Hazardous decomposition products:

No decomposition if stored normally.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No data available.

Method: No data available.

Dosage: No data available.

Routes of administration: No data available.

Results: No data available.

Absorption: No data available.

Distribution: No data available.

Metabolism: No data available.

Excretion: No data available.

Information on toxicological effects:

Acute toxicity:

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Oral LD₅₀ for rat > 5000 mg/kg.

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity: No data available

Reproductive toxicity: No data available.

STOT-single exposure: No data available.

STOT-repeated exposure: No data available.

Aspiration hazard: No data available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

Aquatic toxicity: EC₅₀ (3 h) for bacteria > 1000 mg/L (OECD 209)

 LC_0 (48 h) for golden orfey > 1600 mg/L

Persistence and degradability:

Inorganic salts are basically not biodegradable. Product is easily eliminated by flocculation or adsorption by sludge. Product should not get in higher quantities into waste water because it may act as a plant nutrient and precipitate heavy metals.

Bioaccumulative potential:

Due to the distribution coefficient n-octanol/water an accumulation in organisms is not expected.

Mobility in soil

No data available.

Results of PBT & vPvB assessment:

This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

Other adverse effects:

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Dispose of in accordance with municipal, provincial and national regulations.

Product/ packaging disposal:

Recycle where possible.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not dangerous goods, not applicable	Not dangerous goods, not applicable	Not dangerous goods, not applicable
UN Proper shipping name:	Not applicable	Not applicable	Not applicable
Transport hazard class:	Not applicable	Not applicable	Not applicable
Packaging group:	Not applicable	Not applicable	Not applicable
Marine pollutant:	No	No	No
Special precautions for user:	None	None	None
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	Not applicable	Not applicable	Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture:

Relevant information regarding authorization: None known.

Relevant information regarding restrictions: None known.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP]

Other National regulations: None.

Chemical Safety Assessment carried out? No.

SECTION 16. OTHER INFORMATION

Indication of changes:

GHS aligned.

Relevant classification and H statements (number and full text):

None.

Training instructions:

According to ISO & SANS 11014:2010 & SANS 10234

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Use as instructed.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.