

Revision Date 29/06/2012

Revision 2



SAFETY DATA SHEET HOKOEX®

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name HOKOEX®

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

Identified uses Biocidal products (e.g. disinfectants, pest control).

1.3. Details of the supplier of the safety data sheet

Supplier Hockley International Ltd
Hockley House
3 Longstone Road
Ashbrook Office Park
Manchester
M22 5LB
TEL: +44 (0) 161 209 7400
FAX: +44 (0) 161 209 7401
sds@hockley.co.uk

1.4. Emergency telephone number

+44 (0) 161 209 7400 9am - 5pm GMT

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Not classified.

2.2. Label elements

Risk Phrases

NC Not classified.

Safety Phrases

S2 Keep out of the reach of children.
S7/8 Keep container tightly closed and dry.
S13 Keep away from food, drink and animal feeding stuffs.
S20/21 When using do not eat, drink or smoke.
S47 Keep at temperature not exceeding 30°C.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE	2% min
CAS-No.:	EC No.:
Classification (EC 1272/2008) Aquatic Chronic 2 - H411	Classification (67/548/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

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4.1. Description of first aid measures

General information

Remove affected person from source of contamination. CAUTION! First aid personnel must be aware of own risk during rescue! Place unconscious person on the side in the recovery position and ensure breathing can take place.

Inhalation

Move the exposed person to fresh air at once. Get medical attention. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. If breathing stops, provide artificial respiration.

Ingestion

Rinse mouth thoroughly. Get medical attention immediately! If breathing stops, provide artificial respiration.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Get medical attention immediately. Continue to rinse.

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

Inhalation

No data available.

Ingestion

No data available.

Skin contact

No data available.

Eye contact

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of fire, toxic gases (CO, CO₂, NO_x) may be formed.

Specific hazards

Dike and collect extinguishing water. Avoid releasing to the environment. Do not discharge into drains, water courses or onto the ground.

5.3. Advice for firefighters

Special Fire Fighting Procedures

In case of fire and/or explosion do not breathe fumes

Protective equipment for fire-fighters

Wear full protective clothing (EN 469). Self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Warn everybody of potential hazards and evacuate if necessary.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Stop leak if possible without risk.

6.3. Methods and material for containment and cleaning up

Remove spillage with vacuum cleaner. If not possible, collect spillage with shovel, broom or the like. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

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SECTION 7: HANDLING AND STORAGE**7.1. Precautions for safe handling**

Handle and open container with care. Wear protective clothing as described in Section 8 of this safety data sheet. Do not release into the environment. Do not allow to enter drains, sewers or watercourses. Do not eat, drink or smoke when using the product. Wash hands after handling. Remove contaminated clothing. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Store away from incompatible materials listed in section 10 of this safety data sheet. Keep out of the reach of children.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters**Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controlsEngineering measures

Provide adequate ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. Use respiratory equipment with particle filter, type P1. (EN 140/143)

Hand protection

Wear protective gloves (EN 374).

Eye protection

Avoid contact with eyes. Wear approved safety goggles (EN 166).

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.

Thermal hazards

No data available.

Environmental Exposure Controls

Do not release into the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

<u>Appearance</u>	Granular
<u>Colour</u>	White / off-white.
<u>Odour</u>	No characteristic odour.
<u>Solubility</u>	Soluble in water.
<u>Initial boiling point and boiling range</u>	Not available.
<u>Melting point (°C)</u>	133 - 135°C
<u>Relative density</u>	1.335
<u>Bulk Density</u>	0.70 g/ml
<u>Vapour density (air=1)</u>	Not available.
<u>Vapour pressure</u>	Not available.
<u>Evaporation rate</u>	Not available.
<u>pH-Value, Diluted Solution</u>	7.5 @ 1%

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Viscosity

Not available.

Solubility Value (G/100G H₂O@20°C)

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not available.

Odour Threshold, Upper

Not available.

Flash point

Not available.

Auto Ignition Temperature (°C)

Not available.

Flammability Limit - Lower(%)

Not available.

Flammability Limit - Upper(%)

Not available.

Partition Coefficient

(N-Octanol/Water)

Not relevant

Explosive properties

Not available.

Oxidising properties

Not available.

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

None known.

Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Strong oxidising substances. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Classification according to Directive 1999/45/EC.

Acute toxicity:

Acute Toxicity (Oral LD50)

5000 mg/kg Rat

Based on available data the classification criteria are not met.

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Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 1.96 mg/l Rat 4 hours

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Calculation method. Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Calculation method. Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Calculation method.

Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Calculation method.

Based on available data the classification criteria are not met.

Carcinogenicity:

Calculation method.

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Calculation method.

Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure:

Calculation method.

Based on available data the classification criteria are not met.

Toxicological information on ingredients.

HOKOEX®
N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

Acute toxicity:

Acute Toxicity (Oral LD50)

> 2000 mg/kg Rat

Based on available data the classification criteria are not met.

Acute Toxicity (Dermal LD50)

> 2000 mg/kg

Based on available data the classification criteria are not met.

Acute Toxicity (Inhalation LC50)

> 3.6 mg/l Rat

Based on available data the classification criteria are not met.

Skin Corrosion/Irritation:

Erythema/Eschar score

Very slight erythema -barely perceptible (1).

Oedema score

Very slight oedema -barely perceptible (1).

Based on available data the classification criteria are not met.

Serious eye damage/irritation:

Based on available data the classification criteria are not met.

Respiratory or skin sensitisation:

Respiratory sensitisation

Data lacking.

Skin sensitisation

M & K test Guinea Pig

Not Sensitising. Based on available data the classification criteria are not met.

Germ cell mutagenicity:

Genotoxicity - In Vitro

Chromosome aberration:

Negative.

Genotoxicity - In Vivo

Micronucleus formation

Negative.

Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity

NOAEL 156 mg/kg/day Oral Rat

Based on available data the classification criteria are not met.

Reproductive Toxicity:

Reproductive Toxicity - Fertility

Two-generation study: NOAEL 51 mg/kg/day Oral Rat P

Reproductive Toxicity - Development

Maternal toxicity: NOAEL 10 mg/kg/day Oral Rabbit

No reproductive or developmental effects occurred at non-parentally toxic doses. Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - Single exposure

Data lacking.

Specific target organ toxicity - repeated exposure:

Based on available data the classification criteria are not met.

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Aspiration hazard:

Not relevant, due to the form of the product.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Classification according to Directive 1999/45/EC. Not classified.

Ecological information on ingredients.

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

Acute Toxicity - Fish

LC50 96 hours > 100 mg/l Onchorhynchus mykiss (Rainbow trout)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours > 100 mg/l Daphnia magna

Chronic Toxicity - Fish Early life Stage

NOEC 32 days = 14 mg/l Pimephales promelas (Fat-head Minnow)

Chronic Toxicity - Aquatic Invertebrates

NOEC 21 days = 0.31 mg/l Daphnia magna

12.2. Persistence and degradability

Ecological information on ingredients.

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

Degradability

The product is not readily biodegradable.

Biodegradation

Soil DT50 < 56 days

12.3. Bioaccumulative potential

Partition coefficient

Not relevant

Ecological information on ingredients.

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

Bioaccumulative potential

The product does not contain any substances expected to be bioaccumulating.

Bioaccumulation factor

BCF < 1

Partition coefficient

log Pow = - 0.069

12.4. Mobility in soil

Ecological information on ingredients.

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

Mobility:

Semi-mobile.

Adsorption/Desorption Coefficient

Soil K_{foc} < 1784

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

Ecological information on ingredients.

N-CYCLOPROPYL-1,3,5-TRIAZINE-2,4,6-TRIAMINE

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

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SECTION 13: DISPOSAL CONSIDERATIONSGeneral information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Waste is suitable for incineration. Contact specialist disposal companies. Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

SECTION 14: TRANSPORT INFORMATIONGeneral

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

No information required.

14.2. UN proper shipping name

No information required.

14.3. Transport hazard class(es)

No information required.

14.4. Packing group

No information required.

14.5. Environmental hazardsEnvironmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

No information required.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**Uk Regulatory References

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

Health and Environmental Listings

Regulation EC 2037/2000 on substances that deplete the ozone layer. Regulation EC 689/2008 concerning the export and import of dangerous chemicals. None of the ingredients are listed.

Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

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Abbreviations and acronyms used in the safety data sheet

PBT - Persistent, bioaccumulative and toxic. vPvB - Very persistent and very bioaccumulative EN - European standard adopted by the European Committee for Standardisation.

Information Sources

World Health Organisation (WHO)/Food and Agriculture Organisation of the United Nations (FAO) Joint Meeting on Pesticide Residues monographs and evaluations. The International Union of Pure and Applied Chemistry (IUPAC) pesticide properties database - <http://sitem.herts.ac.uk/aeru/iupac/index.htm> Available from www.inchem.org. Conclusion regarding the peer review of the pesticide risk assessment of the active substance completed by the European Food Safety Authority - <http://www.efsa.europa.eu/cs/Satellite> United States National Library of Medicine Hazardous Substances Data Bank (HSDB) - <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB> Supplier safety data sheet (SDS).

Revision Date 29/06/2012

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Risk Phrases In Full

NC Not classified.

Hazard Statements In Full

H411 Toxic to aquatic life with long lasting effects.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.