MATERIAL SAFETY DATA SHEET

DCOIT-30

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

Product Name： DCOIT-30
Application： Industrial Microbicide
Uses advised against： No further relevant information available.
Supplier's details:
Company name: SINOTRUST CHEMICAL CO. LTD
Add: NO.813 SELF TRADE BUILDING F.T.Z. DALIAN CHINA
TEL: 0086-139 9868 3145 Email: sales@sinotrustchemical.com
Emergencies phone: 0086-139 9868 3145

2 Hazards identification

Classification of the substance or mixture
Classification and labelling according Regulation (EC) No 1272/2008 [CLP / GHS]
Hazard pictograms

Signal word	Danger
Hazard-determining components of labelling	4,5-Dichlor-2-octyl-3(2H)-isothiazol-3-one, Xylene
Hazard statements	H226： Flammable liquid and vapour. H302： Harmful if swallowed. H311： Toxic if contact with skin. H314： Cause severe skin burns and eye damage. H315： Causes skin irritation. H317： May cause an allergic skin reaction. H330： Toxic if inhaled. H400： Very toxic to aquatic life. H400： Very toxic to aquatic life.
Precautionary statements	P280： Wear protective gloves/protective clothing/eye protection/ face protection. P303/P311/P353:If on skin (or hair):Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or physician.
Precautionary statements	P305/P351/P338： If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.
P301/P310/P331: If swallowed: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
P304/P341/P310：If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician.
P391/P501：Collect spillage/Dispose of contents/container.

Other hazards： Not available.

3 Composition/information on ingredients

Chemical characterization Mixtures
Description 4, 5-Dichlor-2-octyl-3(2H)-isothiazol-3-one Component
Component

64359-81-5	4,5-Dichlor-2-octyl-3(2H)-isothiazol-3-one	≥30%
1330-20-7	Xylene	Balance

* All concentrations are percent by weight.

4 First- aid measures

Description of first aid measures

Inhalation: Move subject to fresh air.

Eye Contact: Immediately flush eyes with a large amount of water for at least 15minutes. Get prompt medical attention.

Skin Contact: Wash affected skin areas thoroughly with soap and water immediately after exposure. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered. Discard contaminated shoes, belts and other articles made of leather. Get prompt medical attention.

Ingestion: Clean mouth with water and drink afterwards plenty of water. Immediately see a physician. Never give anything by mouth to an unconscious person.

Note to Physician: Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage

Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5 Fire-fighting measures

Extinguishing media

Suitable extinguishing agents: Water spray jet, extinguishing powder, CO2, foam.
For safety reasons unsuitable extinguishing agents: Water with full jet.

Special hazards arising from the substance or mixture	In case of fire, toxic incineration products may be released such as: Nitrogen oxides (NOx) Carbon monoxide (CO) Sulphur dioxide (SO2) Hydrogen chloride (HCl)

Advice for firefighters

Protective equipment	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Special fire-fighting procedures	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. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walkthrough spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment（see section 8）.
Environmental precautions	Avoid dispersal of spilled 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.
Methods and material for containment and cleaning up	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, watercourses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 13 for waste disposal. Suitable binder: multi-purpose absorbent. Dispose of contaminated binding material in accordance with local, state and federal regulations. Surfaces can be decontaminated with a solution containing 5% sodium hydrogensulfite and 5% sodium bicarbonate.

7 Handling and storage

Handling

Precautions for safe handling	Ensure good ventilation/exhaustion at the workplace. Handle product in closed systems preferably. Prevent contamination of inhaled air by not heating the product or causing aerosols to be formed. Load carefully, avoid splashes. Compliance with the minimum requirements designed to guarantee a better standard of safety and health at work is essential to ensure the safety and health of workers.
Information about protection against explosions and fires	No special measures required.

Conditions for safe storage, including any incompatibilities

Storage	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. Requirements to be met by storerooms and receptacles: Store only in the original receptacle. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.
Packaging materials Recommended use	Use original container.

8 Exposure controls/personal/protection

Control parameters

Occupational exposure limits	Not available.

Engineering Controls

Engineering measures	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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.
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 eye wash stations and safety showers are close to the workstation location.
Components with limit values that require monitoring at the workplace	Not required.
Personal protective measures Respiratory system protection	OV/N95 or OV/P100; organic vapors/prefilter (NIOSH approval No. TC-84A-0699). When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.
Skin and body protection	Full head, face and neck protection.


Protective work clothing


Apron

Hand protection — Chemical protective gloves according to DIN EN 374 with CE-labelling. Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes protection — Safety face mask complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

a)Appearance:
Form: Liquid
Color: Yellow

b) Odor：No Data

c) Odour threshold：No Data

d) pH-value：Not determined

e) Melting point：-3℃

f) Boiling point/Boiling range：138-144℃ Xylene

g) Flash point：28℃ Xylene

h) Evaporation rate: Not determined

i) Flammability (solid, liquid) : Not applicable

j) Upper/lower flammability or explosive limits:12.3% Xylene/1.9% Xylen

k) Vapor pressure at 16℃: 5.0mmHg

l) Vapour density: No Data

m) density at 25℃:1.28 g/mL

n) Water solubility: Insoluble

o) Partition coefficient (Kow)：Not Determined

p) Autoignition temperature: Not applicable

q) Decomposition temperature：Not Determined

r) Viscosity：Not applicable

s) Explosive properties：No Data

• Other information — No further relevant information available.

10 Stability and reactivity

Reactivity

Instability — This material is considered stable under specified conditions of storage, shipment and/or use. See section 7, Handling and storage, for specified conditions.

Possibility of hazardous reactions — No dangerous reactions known.

Thermal decomposition/ Conditions to be avoided — Before handling, the product should not be diluted or mixed with other chemicals, in order to avoid any negative influences on the active ingredient(s).

Incompatibility — Avoid contact with the following：

	oxidizing agents ,reducing agents ,amines , mercaptans.
Hazardous decomposition products	Thermal decomposition may yield the following： carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides, halogenated compounds.

11 Toxicological information

Acute oral toxicity	No data available
Acute inhalation toxicity	No data available The DCOIT presents corrosive properties for the respiratory tract.
Acute dermal toxicity	No data available
Skin irritation	Rabbit 4 h Severe skin irritation
Eye irritation	Rabbit moderate to severe.
Sensitisation	Buehler Test causes sensitization.
Specific target organ toxicity	Respiratory tract irritation.

12 Ecological information

Very toxic to aquatic organisms.

Toxicity to fish	LC50 Oncorhynchus mykiss (rainbow trout) 96 h 0.0027 mg/l
Toxicity to algae	Static test EbC50 Pseudokirchneriella subcapitata (green algae) 72 h OECD Test Guideline 2010,048 mg/l
Toxicity to algae	Static test ErC50 Pseudokirchneriella subcapitata (green algae) 72 h OECD Test Guideline 2010,077 mg/l
Toxicity to aquatic invertebrates	EC50 Daphnia magna (Water flea) 48 h 0.0052 mg/l

13 Disposal considerations

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Empty containers may retain some product residues. This material and its container must be disposed of in a safe way. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.
European waste catalogue (EWC)	Not available.
Hazardous waste	The classification of the product may meet the criteria for a hazardous waste.

14 Transport information

DOT

Proper shipping name	Corrosive, liquid, n.o.s. (4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one)
UN-Number	UN 2811
Class	8（6.1）
Packing group	III

IMO/IMDG

Proper shipping name	Corrosive, liquid, n.o.s. (4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one)
UN-Number	UN 2811
Class	8（6.1）
Packing group	III
Marine pollutant	4,5-Dichloro-2-n-octyl-4-isothiazolin-3-one

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations

15 Regulatory information

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 authorization 、 Substances of very high concern

None of the components is 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

Europe inventory ： This material is listed or exempted.
Black List Chemicals ： Not listed
Black List Chemicals ： Not listed
Integrated pollution prevention and control list (IPPC) - Air ： Not listed
Integrated pollution prevention and control list (IPPC) - Water ： Not listed

National regulations

Europe inventory ： This material is listed or exempted.
Australia inventory (AICS) ： This material is listed or exempted.
China inventory (IECSC) ： This material is listed or exempted.
Japan inventory ： This material is listed or exempted.
Korea inventory ： This material is listed or exempted.
Malaysia Inventory (EHS Register) ： Not determined.

New Zealand Inventory of Chemicals (NZIOC) ： This material is listed or exempted.
Philippines inventory (PICCS) ： This material is listed or exempted.
Taiwan inventory (CSNN) ： Not determined.
United States inventory (TSCA 8b) ： This material is listed or exempted.
Canada inventory ： This material is not listed in DSL but is listed in NDSL.

Germany

Hazard class for water ： 3 Appendix No. 2
Chemical Weapons Convention List Schedule I Chemicals ： Not listed
Chemical Weapons Convention List Schedule II Chemicals ： Not listed
Chemical Weapons Convention List Schedule III Chemicals ： Not listed

16 Other information

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.

Abbreviations and acronyms

CAS	Chemical Abstracts Service (Registry Number)
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
LC50	LC stands for lethal concentration. LC50 is the concentration of a material in air which causes the death of 50% (one half) of a group of test animals
LD50	LD stands for Lethal Dose. LD50 is the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals

* Data compared to the previous version altered.