



according to 1907/2006/EC, Article 31

Printing date 01.10.2014 Version number 62 Revision: 01.10.2014

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

- · 1.1 Product identifier
- · Trade name: ACTICIDE DDQ 50
- 1.2 Relevant identified uses of the substance or mixture and uses advised against Biocidal product for industrial use.
- · 1.3 Details of the supplier of the safety data sheet
- · Address and telephone number of the supplier:

Thor Specialities (UK) LTD.

Wincham Avenue Wincham Northwich Cheshire CW9 6GB

United Kingdom

Phone: (UK) +44 (0) 1606 818800 Fax: (UK) +44 (0) 1606 818801

· Competent person responsible for the Material Safety Data Sheet:

Regulatory Department: sds@thor.uk.com

· 1.4 Emergency telephone number:

National Poisons Information Service (24 h service):

Phone: +44 (0) 844-892-0111 (UK only)

Transport Emergency phone number (24 h service): Phone: +49 621 60-43333 - Fax: +49 621 60-92664

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS05 corrosion

Met. Corr.1 H290 May be corrosive to metals.

Skin Corr. 1B H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.



Acute Tox. 4 H302 Harmful if swallowed.

STOT SE 3 H336 May cause drowsiness or dizziness.

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· Classification according to Directive 67/548/EEC or Directive 1999/45/EC

1

C; Corrosive

R34: Causes burns.

×

Xn; Harmful

R22: Harmful if swallowed.

*

N; Dangerous for the environment

R50: Very toxic to aquatic organisms.

R10-67: Flammable. Vapours may cause drowsiness and dizziness.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is labelled according to the CLP regulation.

· Hazard pictograms









GHS02 GHS05 GHS07 GHS09

· Signal word Danger

· Hazard-determining components of labelling:

didecyldimethylammonium chloride propan-2-ol

· Hazard statements

H226 Flammable liquid and vapour.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

· Precautionary statements

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection. P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P391 Collect spillage.

· 2.3 Other hazards Other hazards have not been identified for this product.

SECTION 3: Composition/information on ingredients

· 3.2 mixtures

· **Description:** Microbiozide based on twin chain quaternary ammonium compound.

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· Dangerous components:		
CAS: 7173-51-5 EINECS: 230-525-2 Index number: 612-131-00-6	didecyldimethylammonium chloride C R34; Xn R22; N R50 Met. Corr.1, H290; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 (M=10); Aquatic Chronic 2, H411; ↑ Acute Tox. 4, H302; Acute Tox. 4, H312	50%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25	propan-2-ol Xi R36; → F R11 R67 → Flam. Liq. 2, H225; → Eye Irrit. 2, H319; STOT SE 3, H336	10 - 25%
· Additional information For the	the wording of the listed risk/hazard phrases refer to section	16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information

Obtain special instructions from the poison information centre: Phone: +44 (0) 844-892-0111 (UK only) - see as well section 1.4.

Personal protection for the First Aider.

- · After inhalation Supply fresh air; consult doctor in case of symptoms.
- · After skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation or rash occurs: Get medical advice/attention.

· After eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a doctor immediately.

· After swallowing

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Bring vomiting person into recovery position.

Do not give anything by mouth to an unconscious person.

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

Corrosive damage to gastro-intestinal tract.

Dazed

- · Information for doctor Probable mucosal damage may contraindicate the use of gastric lavage.
- · Danger Danger of gastric perforation.
- · 4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with activated carbon.

Rinse eyes thoroughly with physiological saline.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents Water spray jet, extinguishing powder, CO2, foam.
- · Unsuitable extinguishing agents for reasons of safety: None

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· 5.2 Special hazards arising from the substance or mixture

In case of fire, toxic incineration products may be released such as:

Nitrogen oxides (NOx)

Hydrogen chloride (HCI)

Carbon monoxide (CO)

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Particular danger of slipping on leaked/spilled product.

Wear protective clothing (see item 8).

Keep unprotected persons away.

When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermeable protective clothes, protective boots made of neoprene, complete face protection and nitrile-rubber-gloves with long tops should be worn.

· 6.2 Environmental precautions:

As the product is hazardous for the aquatic environment, it must be prevented from reaching surface water.

Prevent from spreading (e. g. by enclosing with a ring of chemical absorbent).

Inform authorities in case of contamination of water or sewage system.

· 6.3 Methods and material for containment and cleaning up:

Collect large amounts in suitable container. Cover the rest with absorbent, mix intensively and collect mechanically.

Suitable binder: multi-purpose absorbent.

Dispose of contaminated material as waste according to item 13.

Decontamination procedure: Quats are incompatible with anionic compounds, e. g. with anionic surfactants. If product is released unintentionally into waste water, drain the contaminated waste water and collect it in an appropriate container. Adjust with sodium lauryl sulphate solution (concentration twice as high as the active ingredient in the wastewater) to a mixture ratio of 1:1. Request further instructions from the supplier. Polluted surfaces can be decontaminated with a 10% sodium lauryl sulphate solution.

· 6.4 Reference to other sections None.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good exhaust ventilation at the workplace.

It is preferable to handle the product in a closed system.

Load carefully, avoid splashes.

Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.

· Information about protection against explosion and fire:

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Protect against electrostatic charges.

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Traces of flammable substances may collect in the voids of closed systems. Keep ignition sources

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage
- · Requirements to be met by storerooms and containers:

Store only in the original container.

Information about suitable materials for vessels and piping can be requested from our sales department Tel.: +44(0)1606 818800.

- Information about storage in a common storage facility: Store away from foodstuffs.
- · Further information about storage conditions:

Store in a well-ventilated place. Keep cool.

If the product crystallizes at low temperatures, it can be restored by slowly warming the product. The effectiveness is not affected hereby.

Prevent release to the environment by adequate secondary containment design and use of appropriate spill control procedures.

· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Components with critical values that require monitoring at the workplace:

67-63-0 propan-2-ol (10 - 25%)

WEL (Great Britain) Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm

- · Additional information: Information valid at the time of review of safety data sheet.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures:

Use skin cream for skin protection.

Avoid contact with the eyes and the skin.

Wash hands during work breaks and at the end of the shift.

Provide skin protection plan.

- · Respiratory protection: Filter A/P2. (DIN/EN 141)
- Protection of hands:



Chemical protective gloves according to DIN EN 374 with CE-labelling.

Check the condition of protective gloves after each use for any damages like holes, cuts or tears. Do not wear protective gloves longer than necessary.

After use of gloves apply skin-cleaning agents and skin cosmetics.

- · Material of gloves: Nitrile rubber, NBR
- · Penetration time of glove material:

Thickness: 0.4 mm; break-through time: 480 min; material: Nitrile; permeation: level 6

· Gloves made of the following materials are not suitable:

Gloves for mechanical protection do not provide protection against chemicals.

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· Eye protection:



Face shield (visor) with CE - label

· Body protection:



Protective clothing.



Apron

Full head, face and neck protection

Risk management measures

The operators shall be instructed adequately.

The workplace shall be inspected regularly by competent personnel e.g. the safety representative.

SECTION 9: Physical and chemical properties

 \cdot 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Liquid Colour: Clear

Colourless to slightly yellowish

Odour: alcoholicOdour threshold: Not determinedpH-value: Not determined.

· Change in condition

Melting point/Melting range: - 31 °C Boiling point/Boiling range: 92 °C

• Flash point: 34 °C (ISO 13736 - S 3535)

· Ignition temperature: 260 °C (solvent)

· Self-inflammability: Product is not self-igniting.

• Danger of explosion: Product is not explosive. However, formation of explosive air/gas

mixtures is possible.

· Critical values for explosion:

Lower: 2.0 Vol % (solvent)
Upper: 12.0 Vol % (solvent)

• Vapour pressure at 20 °C: 48 hPa (solvent)

• Density at 20 °C 0.895-0.915 g/cm³

· Solubility in / Miscibility with

Water: Fully miscible

Organic solvents: 20 %

• **9.2 Other information** No further relevant information available.

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SECTION 10: Stability and reactivity

- · 10.1 Reactivity Corrosive action on metals possible.
- · 10.2 Chemical stability
- · 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 ingredient(s).

- · Minimum shelf life: 24 months from production date.
- 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products:

None, if storage and handling is done according to specification.

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- · Acute toxicity:

 LD/LC50 	values	that are	relevant	for	classification
· LD/LOJU	values	unat are	I CIC Valit	101	Ciassilication

Oral	LD50	658 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rat	

- · Primary irritant effect:
- on the skin:

Caustic effect on skin and mucous membranes.

7173-51-5 didecyldimethylammonium chloride		
Dermal	OECD 404 (skin)	corrosive (rabbit) (OECD 404)
		S 463

- on the eye: Based on the skin toxicity data this mixture is assumed to cause severe eye damage.
- Sensitisation:

Non sensitising.

7173-51-5 didecyldimethylammonium chloride Sensitisation OECD 406 (Buehler) not sensitsing (Guinea pig) (OECD 406) S 464

- · Specific target organ toxicity (STOT): May cause drowsiness or dizziness.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):

This mixture is not considered to be "CMR" based on results of tests with the ingredients.

SECTION 12: Ecological information

· 12.1 Toxicity

	uatic	

EC50 / 48 h 0.06 mg/l (Daphnia)

EC50 / 96 h 0.12 mg/l (Selenastrum capricornutum)

LC50 / 96 h | 0.97 mg/l (Brachydanio rerio)

- · Evaluation: Very toxic to aquatic life.
- Evaluation: Depending on concentration, toxic effects on activated sludge organisms are possible.

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- · 12.2 Persistence and degradability
- · Degree of elimination:
- · Biodegradability:

7173-51-5 didecyldimethylammonium chloride

OECD 301 D Closed-Bottle-Test > 70 % (Activated Sludge) (OECD 301 D) S 598

- · Evaluation: The component(s) is (are) rapidly biodegradable.
- · 12.3 Bioaccumulative potential

· BCF / LogKow:	
7173-51-5 didecyldimethylammonium	chloride
OECD 117 Log Kow (HPLC method)	(n-Octanol/water) (OECD 117) not determinable
OECD 305 Biokonzentrationsfaktor BCF	81 BCF (Fish) (OECD 305) literature

- · Evaluation: Not worth-mentioning accumulating in organisms
- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · AOX-indication:

The product does not contain substances, which can influence the AOX of waste water. Care should be paid to properly washing out the chloride when performing the AOX method.

- · Heavy metals and their compounds according to Directive 2006/11/EC: The product does not contain any heavy metals.
- · 12.5 Results of PBT and vPvB assessment
- · PBT: This mixture does not contain substances that meet the PBT-criteria of REACH, annex XIII.
- · vPvB: This mixture does not contain substances that meet the vPvB-criteria of REACH, annex XIII.
- · 12.6 Other adverse effects Any other adverse effects on the environment are not expected.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must be specially treated under adherence to official regulations.

Appropriate disposal operations according to Directive 2008/98/EC on waste: D 10 Incineration on land

· European	waste catalogue
16 00 00	WASTES NOT OTHERWISE SPECIFIED IN THE LIST
16 03 00	off-specification batches and unused products
16 03 05*	Organic wastes containing dangerous substances

- · Contaminated packaging:
- · Recommendation: Remove all product from packaging and clean thoroughly before recycling.
- · Recommended cleaning agent: Water, if necessary with cleaning agent.





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SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA

UN2920

· 14.2 UN proper shipping name

2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. · ADR

(didecyldimethylammonium chloride,

ISOPROPANOL (ISOPROPYL ALCOHOL)),

ENVIRONMENTALLY HAZARDOUS

CORROSIVE LIQUID, FLAMMABLE, N.O.S.

(didecyldimethylammonium chloride,

ISOPROPANOL (ISOPROPYL ALCOHOL)),

MARINE POLLUTANT CORROSIVE LIQUID, FLAMMABLE, N.O.S.

(didecyldimethylammonium chloride,

ISOPROPANOL (ISOPROPYL ALCOHOL))

· 14.3 Transport hazard class(es)

· ADR

· IMDG

·IATA







· Class 8 (CF1) Corrosive substances.

· Label 8+3

· IMDG







8 Corrosive substances. · Class

· Label 8+3

·IATA





· Class 8 Corrosive substances.

· Label 8+3

· 14.4 Packing group

· ADR, IMDG, IATA Ш

· 14.5 Environmental hazards:

· Marine pollutant: Yes

Symbol (fish and tree) Symbol (fish and tree) · Special marking (ADR):

· 14.6 Special precautions for user Warning: Corrosive substances.

· Kemler Number: 83 · EMS Number: F-E,S-C

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· 14.7 Transport in bulk according to Annex II

of MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ)

• Excepted quantities (EQ) Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

Transport categoryTunnel restriction code

· IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E2

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml

· IATA

• Remarks: Packing Instructions / max. net weight: Passenger

aircraft: 851 / 1 L; Cargo aircraft: 855 / 30 L UN2920, CORROSIVE LIQUID, FLAMMABLE,

N.O.S. (didecyldimethylammonium chloride, ISOPROPANOL (ISOPROPYL ALCOHOL)), ENVIRONMENTALLY HAZARDOUS, 8 (3), II

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Information about limitation of use:

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

Take note of Directive 92/85/EC on the safety and health of pregnant women at work.

· Regulations which may apply in event of accident: Control of Major Accident Hazards (COMAH)

Critical quantity values according to the regulations on accidents (Seveso Directive) should be adhered to.

PCS-no. (IRL): 93748

· UN "Model Regulation":

- · Indication of VOC:
- · Directive 1999/13/EC: VOC-value: 20 % (calculated)
- · Directive 2004/42/EG: Max. VOC-content: 181 g/L.
- · SVOC according to EU-Ecolabel for interior and exterior paints (2014/312/EU):

This product does not contain any Semi Volatile Organic Compounds in the definition of the 2014/312/EU.

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This data is based on our current knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

Relevant phrases

H225 Highly flammable liquid and vapour.

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H290 May be corrosive to metals.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

R11 Highly flammable.

R22 Harmful if swallowed.

R34 Causes burns.

R36 Irritating to eyes.

R50 Very toxic to aquatic organisms.

R67 Vapours may cause drowsiness and dizziness.

· Training hints

Further information regarding the directions for use can be found in the Product Data Sheet.

· Classification according to Regulation (EC) No 1272/2008

The classification includes the relevant available information about the mixture or the substances contained therein.

The evaluation of the available information within the scope of classification refers to the forms and aggregate states in which the mixture has been placed on the market and will be used most likely.

· Contact for technical information: Biocides: info@thor.uk.com

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the

International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids, Hazard Category 2 Flam. Liq. 3: Flammable liquids, Hazard Category 3

Met. Corr.1: Corrosive to metals, Hazard Category 1

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Key literature references and sources for data:

Further information regarding physical-chemical, toxicological and ecotoxicological properties of the substances contained, can be taken from the data set for the substance (http://echa.europa.eu/en/).

Data source(s): Biocidal product dossier(s)

· * Data altered since the previous version.