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SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 6.0 Revision Date 10.11.2016 Print Date 21.11.2018 GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

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

1.1	Product identifiers Product name	:	Enilconazole	
	Product Number Brand REACH No. CAS-No.		Y0000136 Sigma-Aldrich A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline. 35554-44-0	
1.2 Relevant identified uses of the substance or mixture and uses advised against				
	Identified uses			
		·	Laboratory chemicals, Manufacture of substances	
1.3	1.3 Details of the supplier of the safety data sheet			
	Company	:	Sigma-Aldrich Inc. 3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES	
	Telephone Fax	:	+1 314 771-5765 +1 800 325-5052	
1.4	Emergency telephone nur	Emergency telephone number		
	Emergency Phone #	:	(314) 776-6555	

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 4), H332 Serious eye damage (Category 1), H318 Acute aquatic toxicity (Category 1), H400 Chronic aquatic toxicity (Category 1), H410

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 Pictogram

Danger

Signal word Hazard statement(s) H301 H318

Toxic if swallowed. Causes serious eye damage.

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H332 H410	Harmful if inhaled. Very toxic to aquatic life with long lasting effects.
Precautionary statement(s) P261 P280 P301 + P330 + P331 + P310	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wear eye protection/ face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately
P305 + P351 + P338 + P310	call a POISON CENTER/doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Supplemental Hazard Statements	none

2.3 Other hazards

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.

SECTION 3: Composition/information on ingredients

3.1 Substances

Formula	:	C14H14Cl2N2O
Molecular weight	:	297.18 g/mol
CAS-No.	:	35554-44-0

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component		Classification	Concentration
Imazalil			
CAS-No. EC-No. Index-No.	35554-44-0 252-615-0 613-042-00-5	Acute Tox. 3; Acute Tox. 4; Eye Dam. 1; Aquatic Acute 1; Aquatic Chronic 1; H301, H332, H318, H400, H410 M-Factor - Aquatic Acute: 10	<= 100 %

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

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas

5.3 Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.
- **6.2** Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
- **6.3** Methods and materials for containment and cleaning up Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
- 6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

7.3 Specific end use(s) Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

- 8.1 Control parameters
- 8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

а	a)	Appearance	Form: solid
b)	Odour	No data available
с	;)	Odour Threshold	No data available
d	1)	pН	No data available
e	e)	Melting point/freezing point	No data available
f))	Initial boiling point and boiling range	347 °C at 1013 hPa
g	j)	Flash point	No data available
h	ı)	Evaporation rate	No data available
i))	Flammability (solid, gas)	No data available
j))	Upper/lower flammability or explosive limits	No data available
k	()	Vapour pressure	< 0.001 mmHg at 20 $^\circ\mathrm{C}$
I))	Vapour density	No data available
n	n)	Relative density	1.348 g/cm3 at 26 °C
n	ı)	Water solubility	No data available
0)	Partition coefficient: n- octanol/water	log Pow: 3.82
р)	Auto-ignition temperature	No data available
q	1)	Decomposition temperature	No data available
r))	Viscosity	No data available
s	5)	Explosive properties	No data available
t) Sigma-Ald	/	Oxidizing properties - Y0000136	No data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

- 10.1 Reactivity No data available
- **10.2 Chemical stability** Stable under recommended storage conditions.
- **10.3 Possibility of hazardous reactions** No data available
- **10.4 Conditions to avoid** No data available
- **10.5 Incompatible materials** Strong oxidizing agents
- 10.6 Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen chloride gas In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - 227 mg/kg(Imazalil) Remarks: Behavioral:Muscle weakness. Behavioral:Ataxia. Skin and Appendages: Other: Hair. LC50 Inhalation - Rat - 4 h - 16 mg/l(Imazalil) LD50 Dermal - Rabbit - 4,200 mg/kg(Imazalil)

Skin corrosion/irritation No data available(Imazalil)

Serious eye damage/eye irritation

No data available(Imazalil)

Respiratory or skin sensitisation No data available(Imazalil)

Germ cell mutagenicity

No data available(Imazalil)

Carcinogenicity

IARC: 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 toxicity

Specific target organ toxicity - single exposure No data available(Imazalil)

Specific target organ toxicity - repeated exposure No data available

Aspiration hazard No data available(Imazalil)

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Imazalil)

SECTION 12: Ecological information

12.1 Toxicity

No data available

- 12.2 Persistence and degradability No data available
- **12.3 Bioaccumulative potential** No data available
- 12.4 Mobility in soil No data available(Imazalil)

12.5 Results of PBT and vPvB 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

Very toxic to aquatic life with long lasting effects.

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

	•		
14.1	UN number ADR/RID:	IMDG:	IATA:
14.2	UN proper shipping name ADR/RID: IMDG: IATA:		
14.3	Transport hazard class(es) ADR/RID:	IMDG:	IATA:
14.4	Packaging group ADR/RID:	IMDG:	IATA:
14.5	Environmental hazards ADR/RID:	IMDG Marine pollutant:	IATA:
14.6	Special precautions for user No data available		

SECTION 15: Regulatory information

 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
 15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

- H301 Toxic if swallowed.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

Further information

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