

SAFETY DATA SHEET

according to Regulation (EU) No. 1907/2006

Honeywell

OS® 3000/110 Tetra Oximino Silane in Toluene

KOC65557

Version 1.2

Revision Date 12.02.2008

Print Date 05.02.2010

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product information

Trade name : OS® 3000/110 Tetra Oximino Silane in Toluene

Product code : KOC65557

Company/Undertaking Identification

Company : Honeywell International, Inc.
101 Columbia Road
07962-1057 Morristown

Telephone :
Telefax :
Emergency telephone :
For further information, please contact: : SafetyDataSheet@Honeywell.com

2. HAZARDS IDENTIFICATION

Risk advice to man and the environment

F, Highly flammable
Xn, Harmful

R11 Highly flammable.
R20/21 Harmful by inhalation and in contact with skin.
R40 Limited evidence of a carcinogenic effect.
R43 May cause sensitization by skin contact.

Highly flammable
Harmful
Carcinogenic Category 3
Irritant

See Section 11 for more detailed information on health effects and symptoms.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Chemical Name : OS® 3000/110 Tetra Oximino Silane in Toluene

Hazardous components

Chemical Name	CAS-No.	EC-No.	Index-No.	Classification	Concentration [%]
Toluene	108-88-3	203-625-9	601-021-00-3	F; R11 R63 Xn; R48/20-R65 Xi; R38 R67 Toxic to	<= 60

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				Reproduction Category 3	
Butan-2-one O,O',O'',O'''- silanetetrayltetra oxime	34206-40-1	251-882-0		Xi; R43-R36/38	<= 50
n-Hexane	110-54-3	203-777-6	601-037-00-0	F; R11 R62 Xn; R65-R48/20 Xi; R38 R67 N; R51-R53 Toxic to Reproduction Category 3	<= 7,5
Butanone oxime	96-29-7	202-496-6	616-014-00-0	R40 Xn; R21 Xi; R41 R43 Carcinogenic Category 3	<= 5

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the R phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

- General advice : Immediately take off contaminated clothing and rinse body with plenty of water
- Inhalation : Move to fresh air.
- Skin contact : Wash off immediately with plenty of water.
Call a physician immediately.
- Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Ingestion : When swallowed accidentally, drink sufficient amounts of water and seek medical aid.
Do NOT induce vomiting.

Notes to physician

Treatment : Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

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5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO₂)
Dry chemical
- Extinguishing media which shall not be used for safety reasons : High volume water jet
- Specific hazards during fire fighting : Fire may cause evolution of:
Carbon dioxide (CO₂)
Carbon monoxide
nitrogen oxides (NO_x)
- Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.
No unprotected exposed skin areas.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Ensure adequate ventilation.
- Methods for cleaning up : Soak up with inert absorbent material.
Pick for disposal in tightly closed containers

For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Exhaust ventilation at the object is necessary.
- Advice on protection against fire and explosion : No special protective measures against fire required.

Storage

- Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.
Recommended storage temperature: 10-15°C
- Advice on common storage : Do not store together with:
Acids
Oxidizing agents
Keep away from iron and water

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls

Components	Basis	Value type	Control parameters	Exceeding Factor	Form of exposure	Remarks
Toluene	EU ELV	time weighted average	192 mg/m3 50 ppm			
Toluene	EU ELV	Short term exposure limit	384 mg/m3 100 ppm			
Toluene	EH40 WEL	time weighted average	191 mg/m3 50 ppm			
Toluene	EU ELV	Skin designation:				Can be absorbed through the skin.
Toluene	EH40 WEL	Short term exposure limit	574 mg/m3 150 ppm			
Toluene		Skin designation:				Can be absorbed through the skin.
n-Hexane	EH40 WEL	time weighted average	72 mg/m3 20 ppm			
n-Hexane	EU ELV	time weighted average	72 mg/m3 20 ppm			

Personal protective equipment

Respiratory protection : Remarks: In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection : Glove material: butyl-rubber

Eye protection : Safety glasses with side-shields

Skin and body protection : Protective suit

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

Colour : light yellow

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Odour : aromatic

Safety data

Boiling point/boiling range : > 110 °C
at 1.013 hPa

Flash point : 4 °C
Method: closed cup

Density : 0,938 g/cm³
at 20 °C

Water solubility : Remarks: Reacts violently with water.

10. STABILITY AND REACTIVITY

Conditions to avoid : Heat.

Materials to avoid : Reactions with water and acids.

Hazardous decomposition products : Carbon monoxide
Carbon dioxide (CO₂)
Silicone oxide
nitrogen oxides (NO_x)

Thermal decomposition : Note: No decomposition if used as directed.

11. TOXICOLOGICAL INFORMATION

Acute dermal toxicity : LD50
Species: rat
Dose: 938 - 1.876 mg/kg

Skin irritation : Result: irritating

Eye irritation : Result: irritating

12. ECOLOGICAL INFORMATION

Additional ecological information : No information on ecology is available.

13. DISPOSAL CONSIDERATIONS

Product : Dispose according to legal requirements.

Packaging : Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

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14. TRANSPORT INFORMATION

ADR

UN Number : 1993
Description of the goods : FLAMMABLE LIQUID, N.O.S.
(TOLUENE, HEXANE, SOLUTION)
Class : 3
Packaging group : II
Classification Code : F1
Hazard identification No : 33
Hazard Label : 3
Special Provision 640D

IATA

UN Number : 1993
Description of the goods : Flammable liquid, n.o.s.
(Toluene, Hexane, Solution)
Class : 3
Packaging group : II
Hazard Label : 3
Packing instruction (cargo aircraft) : 307
Packing instruction (passenger aircraft) : 305
Packing instruction (passenger aircraft) : Y305

IMDG

UN Number : 1993
Description of the goods : FLAMMABLE LIQUID, N.O.S.
(TOLUENE, HEXANE, SOLUTION)
Class : 3
Packaging group : II
Hazard Label : 3
EmS Number : F-E
Marine pollutant : no

RID

UN Number : 1993
Description of the goods : FLAMMABLE LIQUID, N.O.S.
(TOLUENE, HEXANE, SOLUTION)
Class : 3
Packaging group : II
Classification Code : F1
Hazard identification No : 33
Hazard Label : 3
Special Provision 640D

15. REGULATORY INFORMATION

Labelling according to EC Directives 1999/45/EC

Symbol(s) : F Highly flammable
Xn Harmful
R-phrases(s) : R11 Highly flammable.

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	R20/21	Harmful by inhalation and in contact with skin.
	R40	Limited evidence of a carcinogenic effect.
	R43	May cause sensitization by skin contact.
S-phrases(s)	S15	Keep away from heat.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.

Hazardous components which must be listed on the label:

- Toluene 108-88-3
- Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime 34206-40-1
- n-Hexane 110-54-3
- Butanone oxime 96-29-7

16. OTHER INFORMATION

Text of R-phrases referred to under heading 3

Toluene	: R11	Highly flammable.
	R63	Possible risk of harm to the unborn child.
	R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
	R65	Harmful: may cause lung damage if swallowed.
	R38	Irritating to skin.
	R67	Vapours may cause drowsiness and dizziness.
Butan-2-one O,O',O'',O'''-silanetetrayltetraoxime	: R43	May cause sensitization by skin contact.
	R36/38	Irritating to eyes and skin.
n-Hexane	: R11	Highly flammable.
	R62	Possible risk of impaired fertility.
	R65	Harmful: may cause lung damage if swallowed.
	R48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.
	R38	Irritating to skin.
	R67	Vapours may cause drowsiness and dizziness.
	R51	Toxic to aquatic organisms.
	R53	May cause long-term adverse effects in the aquatic environment.
Butanone oxime	: R40	Limited evidence of a carcinogenic effect.
	R21	Harmful in contact with skin.
	R41	Risk of serious damage to eyes.
	R43	May cause sensitization by skin contact.

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Further information

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