

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Honeywell

OS® 4025 Tetraoximinosilane in VOS

KOC65577

Version 2.

Revision Date 30.09.2009

Print Date 05.02.2010

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

Product information

Trade name : OS® 4025 Tetraoximinosilane in VOS

Product code : KOC65577

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

Xn, Harmful

R10 Flammable.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.

Flammable
Harmful
Irritant

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Chemical Name : OS® 4025 Tetraoximinosilane in VOS

Hazardous components

| Chemical Name | CAS-No. | EC-No. | Index-No. | Classification | Concentration |
|--|------------|-----------|--------------|-----------------|---------------|
| Butan-2-one O,O',O''- (vinylsilylidyne)tr ioxime | 2224-33-1 | 218-747-8 | | Xi; R38-R41-R43 | >= 57 - <= 63 |
| Butan-2-one O,O',O'',O'''- silanetetrayltetra oxime | 34206-40-1 | 251-882-0 | | Xi; R43-R36/38 | >= 27 - <= 33 |
| Butanone oxime | 96-29-7 | 202-496-6 | 616-014-00-0 | R40 Xn; R21 | < 10 |

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| | | | | | |
|----------|----------|-----------|--------------|---|-----|
| | | | | Xi; R41 R43 Carcinogenic Category 3 | |
| n-Hexane | 110-54-3 | 203-777-6 | 601-037-00-0 | F; R11 R62 Xn; R48/20-R65 Xi; R38 R67 N; R51-R53 Toxic to Reproduction Category 3 | < 1 |

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

- Inhalation : Move to fresh air.
Skin contact : Wash off immediately with plenty of water.
Eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Ingestion : When swallowed, allow water to be drunk.
Do NOT induce vomiting.
Call a physician immediately.

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

5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Foam
Carbon dioxide (CO₂)
Dry powder
Extinguishing media which shall not be used for safety reasons : Water
Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.

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
Protect against water.

For personal protection see section 8.

7. HANDLING AND STORAGE

Handling

- Advice on safe handling : Exhaust ventilation at the object is necessary.

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Advice on protection against fire and explosion : Keep away from sources of ignition - No smoking.

Storage

Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure controls

| Components | Basis | Value type | Control parameters | Exceeding Factor | Form of exposure | Remarks |
|------------|----------|-----------------------|--------------------------------|------------------|------------------|---------|
| n-Hexane | EH40 WEL | time weighted average | 72 mg/m ³ 20 ppm | | | |
| n-Hexane | EU ELV | time weighted average | 72 mg/m ³ 20 ppm | | | |

Personal protective equipment

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

Hand protection : Glove material: Neoprene gloves

Eye protection : Goggles

Skin and body protection : Protective suit

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : liquid

Colour : dark yellow

Odour : aromatic

Safety data

Flash point : > 23 - 60 °C
Method: closed cup

Density : ca. 0,900 g/cm³
at 20 °C

Water solubility : Remarks: Reacts violently with water.

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10. STABILITY AND REACTIVITY

- Materials to avoid : Reacts violently with water.
- Thermal decomposition : Note: No decomposition if used as directed.

11. TOXICOLOGICAL INFORMATION

- Further information : Remarks: Risk of serious damage to eyes. May cause sensitization by skin contact.

12. ECOLOGICAL INFORMATION

- Additional ecological information : Do not flush into surface water.

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

14. TRANSPORT INFORMATION

ADR

- UN Number : 1993
- Description of the goods : FLAMMABLE LIQUID, N.O.S.
(HEXANES)
- Class : 3
- Packaging group : III
- Classification Code : F1
- Hazard identification No : 33
- ADR/RID-Labels : 3
- Special Provision 640E

IATA

- UN Number : 1993
- Description of the goods : Flammable liquid, n.o.s.
(Hexanes)
- Class : 3
- Packaging group : III
- Hazard Labels : 3
- Packing instruction (cargo aircraft) : 310
- Packing instruction (passenger aircraft) : 309
- Packing instruction (passenger aircraft) : Y309

IMDG

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UN Number : 1993
Description of the goods : FLAMMABLE LIQUID, N.O.S.
(HEXANES)
Class : 3
Packaging group : III
Hazard Labels : 3
EmS Number : F-E
Marine pollutant : no

RID

UN Number : 1993
Description of the goods : FLAMMABLE LIQUID, N.O.S.
(HEXANES)
Class : 3
Packaging group : III
Classification Code : F1
Hazard identification No : 33
ADR/RID-Labels : 3
Special Provision 640E

15. REGULATORY INFORMATION

Labelling according to EC Directives 1999/45/EC

Symbol(s) : Xn Harmful

R-phrase(s) : R10 Flammable.
R38 Irritating to skin.
R40 Limited evidence of a carcinogenic effect.
R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.

S-phrase(s) : S23 Do not breathe vapour.
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.

16. OTHER INFORMATION

Text of R-phrases referred to under heading 3

Butan-2-one O,O',O''- : R38 Irritating to skin.
(vinylsilylidyne)trioxime R41 Risk of serious damage to eyes.
R43 May cause sensitization by skin contact.

Butan-2-one O,O',O'',O'''- : R43 May cause sensitization by skin contact.
silanetetrayltetraoxime R36/38 Irritating to eyes and skin.

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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| | | | |
|----------|-----|---|---|
| n-Hexane | : | R11 | Highly flammable. |
| | | R62 | Possible risk of impaired fertility. |
| | | 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. |
| | | R51 | Toxic to aquatic organisms. |
| | R53 | May cause long-term adverse effects in the aquatic environment. | |

Further 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. Final determination of suitability of any material is the sole responsibility of the user.

This information should not constitute a guarantee for any specific product properties.