according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

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

1.1. Product identifier

Product name

: UOP XH-6 Adsorbent, 8x12

SDS-number

: 000000016491

Type of product

: Mixture

Remarks

: Document according to Art. 32 of Regulation (EC) 1907/2006.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the

: Adsorbent

Substance/Mixture

Uses advised against

: none

1.3. Details of the supplier of the safety data sheet

Company

: UOP N.V.

Belgium

UOP CH

Noorderlaan 147 2030 Antwerp

1180 Rolle Switzerland

Telephone

: +32-3-5409911

+41-21-6953039

Z.A. La Pièce 16

Telefax

: +32-3-5417806

+41-21-6953189

For further information,

: PMTEU Product Stewardship:

please contact:

SafetyDataSheet@Honeywell.com

1.4. Emergency telephone number

Emergency telephone

: +1-703-527-3887 (ChemTrec-Transport)

number

+1-303-389-1414 (Medical)

Country based Poison

Control Center

: see chapter 15.1

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

REGULATION (EC) No 1272/2008

Page 1 / 12

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Precautionary statements

: P280

Wear protective gloves/ eye protection/

face protection.

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3. Other hazards

When first wetted, the product can heat up to the boiling point of water. Flood with water to cool material. Repeated or prolonged exposure may irritate eyes, skin and respiratory system. Repeated and prolonged inhalation of crystalline silica in the form of quartz from occupational sources may cause cancer.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	01-2119429034-49 215-283-8		<= 100 %	N.C.*
Quartz (SiO2)	14808-60-7 238-878-4		< 10 %	N.C.*

N.C.* - Non-hazardous substance - for information only

Remaining components of this product are non-hazardous and/or are present at concentrations below reportable limits.

Occupational Exposure Limit(s), if available, are listed in Section 8. 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

Inhalation:

Remove to fresh air. If symptoms persist, call a physician.

Skin contact:

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Wash off with soap and plenty of water. If skin irritation persists, call a physician.

Eye contact:

Rinse immediately with plenty of water for at least 15 minutes. If eye irritation persists, consult a physician.

Ingestion:

Drink at least 2 glasses of water. Obtain medical attention. Never give anything by mouth to an unconscious person.

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

no data available

4.3. Indication of any immediate medical attention and special treatment needed

This product is a desiccant and generates heat as it adsorbs water. Treat symptomatically. The used product can contain material of a hazardous nature. Identify that material and treat symptomatically.

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Not combustible.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

The used product can retain material of a hazardous nature. Identify that material and inform the fire fighters.

5.3. Advice for firefighters

In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear appropriate personal protective equipment.

6.2. Environmental precautions

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

No special environmental precautions required.

6.3. Methods and materials for containment and cleaning up

Sweep, shovel or vacuum spilled product into appropriate containers (do not use a vacuum if material has contacted a hydrocarbon material).

Pick up and arrange disposal without creating dust.

Never return spills in original containers for re-use.

Spilled product should be disposed of in accordance with all applicable government regulations.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

Handle and open container with care. Avoid dust formation. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Store in original container. Keep in a dry place.

7.3. Specific end use(s)

Specific use information:

A copy of UOP's booklet, "Precautions & Safe Practices for Handling Zeolite Molecular Sieve Adsorbents in Process Units", can be obtained from your UOP representative at no cost.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	EH40 WEL TWA	10 mg/m3 Inhalable dust.		
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	EH40 WEL TWA	4 mg/m3 Respirable dust.		

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1	Revision Date 07	Supersedes 2	
Quartz (SiO2)	EH40 WEL TWA	0,1 mg/m3 Respirable.	

TWA - Time weighted average

DNEL/ PNEC-Values

Component	End-use / Im pact	Exposure duration	Value	Exposure routes	Remarks
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	Workers / Long-term systemic effects		3 mg/m3	Inhalation	
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	Workers / Long-term systemic effects		2,5mg/kg bw/d	Skin contact	
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	Consumers / Long-term systemic effects		0,003 mg/m3	Inhalation	
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	Consumers / Long-term systemic effects		1,25mg/kg bw/d	Skin contact	
Zeolite, cuboidal, crystalline, synthetic, non- fibrous	Consumers / Long-term systemic effects		1,25mg/kg bw/d	Ingestion	
Quartz (SiO2)					no data available

Component	Environmental compartment / Value	Remarks
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	Fresh w ater: 3,2 mg/l	Assessment factor:
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	Marine w ater: 0,32 mg/l	Assessment factor: 100
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	Sew age treatment plant: 95 mg/l	Assessment factor:
Zeolite, cuboidal, crystalline, synthetic, non-fibrous	Soil: 600 mg/kg dw	
Quartz (SiO2)	:	no data available

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

8.2. Exposure controls

Occupational exposure controls

Handle in accordance with good industrial hygiene and safety practice.

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Disposable filtering half mask Class FFP3 (EN149).

Half mask with a particle filter P3 (EN143).

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Safety goggles

Skin and body protection:

Lightweight protective clothing

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form

Beads

pellets

Colour

tan

Odour

: none

Melting point/range

. .

: > 400 °C

Boiling point/boiling range

: Not applicable

Flash point

: Not applicable

Flammability (solid, gas)

: Not applicable

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Ignition temperature

: Not applicable

Lower explosion limit : Not applicable

Upper explosion limit : Not applicable

Vapour pressure

: Not applicable

Density

: > 1,0 g/cm3

Bulk density

: not determined

Viscosity, kinematic : Not applicable

Hq

: Not applicable

Water solubility

: insoluble

Solubility in other solvents : no data available

Partition coefficient: n- : no data available

octanol/water

Relative vapour density : Not applicable

9.2 Other Information

no additional data available

SECTION 10: Stability and reactivity

10.1. Reactivity

no data available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

no data available

10.4. Conditions to avoid

no data available

10.5. Incompatible materials

Page 7 / 12

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins,

When first wetted, the product can heat up to the boiling point of water. Flood with water to cool material.

10.6. Hazardous decomposition products

No decomposition if used as directed.

Hydrocarbons and other materials that contact the product during normal use can be retained on the

It is reasonable to expect that decomposition products will come from these retained materials of use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

LD50

Species: Rat

Value: > 32.000 mg/kg

Acute dermal toxicity:

LD50

Species: Rabbit

Value: > 2.000 mg/kg

Acute inhalation toxicity:

no data available

Skin irritation:

Species: Rabbit

Classification: Not classified as a skin irritant in animal testing.

Eye irritation:

Species: Rabbit

Classification: Not classified as an eye irritant in animal testing.

Respiratory or skin sensitisation:

no data available

Aspiration hazard:

no data available

Other information:

The toxicological data has been taken from products of similar composition.

SECTION 12: Ecological information

12.1. Toxicity

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Toxicity to fish: no data available

Toxicity to aquatic plants: no data available

Toxicity to aquatic invertebrates: no data available

12.2. Persistence and degradability

Biodegradability no data available

12.3. Bioaccumulative potential

no data available

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No information on ecology is available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Can be landfilled or incinerated, when in compliance with local regulations. Store containers and offer for recycling of material when in accordance with the local regulations. Contact waste disposal services. Materials of a hazardous nature that contact the product during normal use may be retained on this product. The user of the product must identify the hazards associated with the retained material in order to assess the waste disposal options.

Further information:

Provisions relating to waste: EC Directive 2006/12/EC; 2008/98/EEC Regulation No. 1013/2006

For personal protection see section 8.

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

SECTION 14: Transport information

ADR/RID

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+)35929154233
Croatia	(+3851)23-48-342
Cyprus	no data available
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	no data available
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	no data available
	Berlin : 030/19240
	Bonn : 0228/19240
Germany	Erfurt: 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240

Country	Phone Number
Latvia	+37167042473
Liechtenstein	no data available
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	no data available
Netherlands	030-2748888
Norw ay	22591300
Poland	no data available
Portugal	808250143
Romania	no data available
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	no data available
Spain	+34915620420
Sweden	112 (begär Giftinformation);+46104566786
United Kingdom	no data available

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

Homburg : 06841/19240
Mainz : 06131/19240
Munich: 089/19240

Other inventory information

US. Toxic Substances Control Act
On the inventory, or in compliance with the inventory

Australia. Industrial Chemical (Notification and Assessment) Act On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List On the inventory, or in compliance with the inventory

Korea. Toxic Chemical Control Law (TCCL) List On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Further information

All directives and regulations refer to amended versions. Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abreviations:

EC European Community

CAS Chemical Abstracts Service

DNEL Derived no effect level

PNEC Predicted no effect level

vPvB Very persistent and very biaccumulative substance

Page 11 / 12

according to Regulation (EC) No. 1907/2006



UOP XH-6 Adsorbent, 8x12

89474

Version 3.1

Revision Date 07.11.2016

Supersedes 2

PBT Persistent, bioaccmulative und toxic substance

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.