

SECTION 1 Chemical product and company identification ►

Chemical name : TUBALL LATEX H2O (NSA)

Details of the supplier

| | | | | |
|--|--|---|--|---|
| 欧洲: | 美国: | 亚洲: | 中国: | 印度: |
| OCSiAl Europe S.a.r.l. L-3364, Leudelange, 1, rue de la Poudrerie, Grand Duchy of Luxembourg | OCSiAl LLC 500 S Front St., Suite 860, Columbus, OH 43215, USA | OCSiAl Asia Pacific Co., Ltd. Office 208, Pilot Plant Bldg., Incheon Technopark 12 Gaetbeol-ro, Yeonsu- gu, Incheon, 406-840 Republic of Korea | OCSiAl Hong Kong Limited No. 1102, 11/F, Lippo Sun Plaza, 28 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong | VIMAL INTERTRADE PVT LTD. Shivam Centrum, Sahar Road, Koldongri, Above Nexa Showroom, Andheri East, Mumbai – 400 069 |
| T +352 27 99 03 73 09.00-17.00 GMT+2 europe@ocsial.com | T +1 415 906 5271 09.00-17.00 GMT-4 usa@ocsial.com | T +82 32 260 0407 09.00-17.00 GMT+9 asiapacific@ocsial.com | T +852 3575 3946 09:00-17:00; GMT+8 china@ocsial.com | T +91 22 6288 4200 09:00-17:00; GMT+5.5 india@ocsial.com |

Emergency phone number

| | |
|-----------------------------|---|
| East/South East Asia | : +65 3158 1074 (English, Hindi, Japanese, Korean, Malay, Mandarin) (Carechem 24) |
| China | : 400 120 6011 (English, Mandarin) (toll-free, access from China only) |
| 中国 (大陆 · 24 小时应急电话) | : **0532 8388 9090 (英语 · 中文) |
| China (Mainland) | : **0532 8388 9090 (English, Chinese; 24-hour emergency call) |

Recommended use of the chemical : Industrial use as additive in polymers, resins and/or coatings

SECTION 2 Hazards identification

Emergency overview

GHS hazard classification

| | |
|------------------|---|
| Physical hazards | : Explosive Not classified |
| | : Flammable gases Not classified |
| | : Aerosols Not classified |
| | : Oxidizing gases Not classified |
| | : Gases under pressure Not classified |
| | : Flammable liquids Not classified |
| | : Flammable solids Not classified |
| | : Self-reactive substances and mixtures Not classified |
| | : Pyrophoric liquids Not classified |
| | : Pyrophoric solids Not classified |
| | : Self-heating substances and mixtures Not classified |
| | : Substances and mixtures which in contact with water emit flammable gases Not classified |
| | : Oxidizing liquids Not classified |
| | : Oxidizing solids Not classified |

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| | |
|-----------------------|--|
| Health hazards | : Organic peroxide Not classified |
| | : Corrosive to metals Not classified |
| | : Acute toxicity (Oral) Not classified |
| | : Acute toxicity (Dermal) Not classified |
| | : Acute toxicity (Inhalation:gas) Not classified |
| | : Acute toxicity (Inhalation:vapour) Not classified |
| | : Acute toxicity (Inhalation:dust,mist) Not classified |
| | : Skin corrosion/irritation Not classified |
| | : Serious eye damage/eye irritation Not classified |
| | : Respiratory sensitization Not classified |
| | : Skin sensitization Not classified |
| | : Germ cell mutagenicity Not classified |
| | : Carcinogenicity Not classified |
| | : Reproductive toxicity Not classified |
| | : Specific target organ toxicity - Single exposure Not classified |
| | : Specific target organ toxicity - Repeated exposure Not classified |
| | : Aspiration hazard Not classified |
| Environmental hazards | : Hazardous to the aquatic environment - Acute hazard Not classified |
| | : Hazardous to the aquatic environment - Chronic hazard Not classified |
| | : Hazardous to the ozone layer Not classified |

Other hazards not mentioned above are Not applicable or No data is available.

Label elements

No data available

Physical and chemical hazards

No additional information available

Health hazards

Symptoms/effects : No additional information available

Environmental hazards

No additional information available

Other hazards

None under normal conditions

SECTION 3 Composition/information on ingredients ►

Product form : Mixture.

| Ingredient(s) | Concentration or concentration ranges (w/w %) | CAS No. |
|---|---|--------------|
| Water | 95.75 - 98.8 | 7732-18-5 |
| Sodium salt of polynaphthalene sulphonic acid | 1 - 3.75 | Trade secret |

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| Ingredient(s) | Concentration or concentration ranges (w/w %) | CAS No. |
|-------------------------------|---|---------|
| Single wall carbon nanotubes* | 0.2 - 0.5 | N/A |

Comments : * Single wall carbon nanotubes TUBALL™.

SECTION 4 First-aid measures

Description of necessary first-aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash with plenty of soap and water.
Take off immediately all contaminated clothing and wash it before reuse.
Wash skin with plenty of water
- First-aid measures after eye contact : Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical attention
- First-aid measures after ingestion : Rinse mouth out with water.
Get medical advice/attention.

Most important symptoms/effects

- Symptoms/effects : No additional information available

Advices for first aid responders

No additional information available

Notes for the doctor

- Other medical advice or treatment : Treat symptomatically

SECTION 5 Fire-fighting measures

Extinguishing media

- Suitable extinguishing media : Not applicable
Water spray
Dry powder
Foam
Carbon dioxide
- Unsuitable extinguishing media : Not applicable

Specific hazards

- Fire hazard : Not applicable
- Hazardous decomposition products in case of fire : Toxic fumes may be released
- Explosion hazard : Not applicable
- Reactivity in case of fire : Not applicable

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Advice for firefighters and protective measures

- Firefighting instructions : No additional information available
- Protection during firefighting : Do not attempt to take action without suitable protective equipment
Self-contained breathing apparatus
Complete protective clothing
- Other information : No additional information available

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

- General measures : No additional information available
- Personal Precautions, Protective Equipment and Emergency Procedures : No additional information available

For non-emergency personnel

- Protective equipment : Wear suitable protective clothing
- Emergency procedures : Ventilate spillage area
Avoid contact with skin, eyes and clothing
Ensure adequate ventilation
Evacuate area.

For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment
Wear suitable protective clothing, gloves and eye/face protection
For further information refer to section 8: "Exposure controls/personal protection"
- Emergency procedures : Provide adequate ventilation
Evacuate area.
Avoid contact with skin and eyes

Environmental precautions

- Avoid release to the environment
- Do not allow to enter into surface water or drains
- Collect contaminated extinguishing water separately and must not enter the sewage system

Methods and material for containment and cleaning up

- Methods for cleaning : No additional information available
- For containment : Clean spills promptly
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Ventilate affected area
Stop leak if safe to do so.

Prevention measures for secondary accidents

- Prevention Measures for Secondary Accidents : No additional information available
- Other information : Dispose of materials or solid residues at an authorized site

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SECTION 7 Handling and storage

Handling

- Precautions for safe handling : Ensure good ventilation of the work station
Wear personal protective equipment
Avoid contact with skin, eyes and clothing
- Hygiene measures : Do not eat, drink or smoke when using this product.
Wash contaminated clothing before reuse.
Always wash hands after handling the product
- Local and general ventilation : No additional information available
- Additional hazards when processed : None known

Storage ►

- Storage conditions : Dispersion should be stored in an inert environment in a tightly closed container at a temperature above 5 ° C till + 50 ° C. Recommended time of use opened container is 72 hours
Store in a well-ventilated place.
Keep cool.
- Material used in packaging/containers : No additional information available
- Incompatible products : Strong oxidizing agents. Strong acids.
- Storage temperature : 5 - 50 ° C

SECTION 8 Exposure controls / Personal protection equipment ►

Occupational exposure limits

Single wall carbon nanotubes (7440-44-0)

Japan - Occupational Exposure Limits

Exposure limits (JSOH)

【Occupational exposure limits for dusts】 (Class 1) Respirable dust 0.5mg/m³
Total dust 2mg/m³

Biological limit values

No additional information available

Monitoring methods

No additional information available

Appropriate engineering controls

No additional information available
Ensure good ventilation of the work station

Personal protective equipment

- Personal protective equipment : Gloves
Protective clothing
Safety glasses
- Environmental exposure controls : Avoid release to the environment.

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Hand protection : Chemically resistant protective gloves

| Type | Material | Permeation | Thickness (mm) | Penetration | Standard |
|--|-----------------------------------|------------|----------------|-------------|----------|
| Disposable gloves, Reusable gloves. | Use neoprene or rubber gloves. | | > 0.18 | | |

Eye protection : Chemical goggles or safety glasses
Safety glasses

Skin and body protection : Protective clothing (with elasticated cuffs and closed neck)

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Personal protective equipment symbol(s)



SECTION 9 Physical and chemical properties

| | |
|--|---------------------|
| Physical state | : Liquid |
| Appearance | : No data available |
| Colour | : Black |
| Odour | : Odourless |
| pH | : 8.5 - 10 |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not applicable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 ° C | : No data available |
| Density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Lower explosive limit (LEL) | : No data available |
| Upper explosive limit (UEL) | : No data available |
| Radioactive | : No |

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SECTION 10 Stability and reactivity

| | |
|---|---|
| Chemical stability | : Stable under normal conditions |
| Reactivity | : Stable under normal conditions |
| Possibility of hazardous reactions | : None known |
| Conditions to avoid | : None known |
| Incompatible materials | : Strong oxidizing agents Strong acids |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced |
| Other properties | : No additional information available |

SECTION 11 Toxicological information

Acute toxicity

| | |
|-----------------------------|---|
| Acute toxicity (oral) | : Not classified. |
| Acute toxicity (dermal) | : Not classified. |
| Acute toxicity (inhalation) | : Not classified. Not classified. Not classified. |

Sodium salt of polynaphthalene sulphonic acid

| | |
|---------------|-----------------------|
| LD50 oral rat | 2000 - 5000 mg/kg |
| ATE CN (oral) | 2000 mg/kg bodyweight |

Skin corrosion/irritation

| | |
|---------------------------|-------------------|
| Skin corrosion/irritation | : Not classified. |
| pH | : 8.5 - 10 |

Serious eye damage/eye irritation

| | |
|-------------------------------|-------------------|
| Serious eye damage/irritation | : Not classified. |
|-------------------------------|-------------------|

Respiratory or skin sensitisation

| | |
|-----------------------------------|-----------------------------------|
| Respiratory or skin sensitisation | : Not classified. Not classified. |
|-----------------------------------|-----------------------------------|

Germ cell mutagenicity

| | |
|------------------------|-------------------|
| Germ cell mutagenicity | : Not classified. |
|------------------------|-------------------|

Carcinogenicity

| | |
|-----------------|-------------------|
| Carcinogenicity | : Not classified. |
|-----------------|-------------------|

Reproductive toxicity

| | |
|-----------------------|-------------------|
| Reproductive toxicity | : Not classified. |
|-----------------------|-------------------|

Single wall carbon nanotubes (7440-44-0)

| | |
|-----------------------------|--------------------------------|
| NOAEL (animal/female, F0/P) | > 1000 mg/kg bw/day - OECD 422 |
|-----------------------------|--------------------------------|

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| | |
|--------------------|---|
| NOAEL (animal, F1) | > 1000 mg/kg bw/day - for adverse effects on prenatal development (conceptus to birth) - OECD 422 |
| NOAEL (animal, F1) | > 1000 mg/kg bw/day - for adverse effects on postnatal development (pup) - OECD 422 |

STOT - single exposure

STOT-single exposure : Not classified.

STOT - repeated exposure

STOT-repeated exposure : Not classified.

Single wall carbon nanotubes

| | |
|----------------------------|--|
| NOAEL (oral, rat, 90 days) | > 1000 mg/kg bodyweight/day - OECD 422 |
|----------------------------|--|

Aspiration hazard

Aspiration hazard : Not classified.

SECTION 12 Ecological information

Ecotoxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Not classified.

Sodium salt of polynaphthalene sulphonic acid

| | |
|-----------------|--|
| LC50 fish - 96h | > 100 mg/l Brachydanio rerio (zebra-fish) - OECD 203 |
|-----------------|--|

Persistence and degradability

Sodium salt of polynaphthalene sulphonic acid

| | |
|-------------------------------|---------------------------------------|
| Persistence and degradability | Not readily biodegradable |
| Chemical oxygen demand (COD) | ≈ 1420 mg O ₂ /g substance |

Bioaccumulative potential

Sodium salt of polynaphthalene sulphonic acid

| | |
|---------------------------|--|
| Bioaccumulative potential | Bioaccumulation is not expected to occur |
|---------------------------|--|

Mobility in soil

Sodium salt of polynaphthalene sulphonic acid

| | |
|----------------|--|
| Ecology - soil | Bioaccumulation is not expected to occur |
|----------------|--|

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Other adverse effects

Classification procedure (Ozone) : Not classified.

SECTION 13 Disposal considerations ►

- Waste treatment methods** : Dispose of this material and its container at hazardous or special waste collection point, Dispose of contents/container in accordance with licensed collector' s sorting instructions.
- Contaminated container and packaging** : No additional information available
- Additional information** : Clean up even minor leaks or spills if possible without unnecessary risk.
- Product/Packaging disposal recommendations** : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- Sewage disposal recommendations** : Prevent entry to sewers and public waters
- Regional legislation (waste)** : Disposal must be done according to official regulations

SECTION 14 Transport information

| Overland transport (JT/T 617) | Transport by sea | Air transport |
|---------------------------------------|------------------|---------------|
| UN number | | |
| Not regulated | Not regulated | Not regulated |
| Proper shipping name | | |
| Not regulated | Not regulated | Not regulated |
| Transport document description | | |
| Not regulated | Not regulated | Not regulated |
| Transport hazard class(es) | | |
| Not regulated | Not regulated | Not regulated |
| Not regulated | Not regulated | Not regulated |
| Packing group | | |
| Not regulated | Not regulated | Not regulated |
| Environmental hazards | | |
| Not regulated | Not regulated | Not regulated |

Special transport precautions

Overland transport (JT/T 617)

Not regulated

Transport by sea

Not regulated

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Air transport

Not regulated

SECTION 15 Regulatory information ►

| Regulation name | Specific information | |
|---|---|---|
| Regulations on the Safety Management of Hazardous Chemicals | Hazardous Chemicals List | Single-walled carbon nanotubes are not listed |
| | List of the first batch of critically regulated hazardous chemicals | Single-walled carbon nanotubes are not listed |
| Environmental management regulations for the first import of chemicals and the import and export of toxic chemicals set | List of Toxic Chemicals Strictly Restricted from Import and Export in China | Single-walled carbon nanotubes are not listed |
| Measures for the Environmental Management of New Chemical Substances | Inventory of Existing Chemical Substances in China (IECSC) | Single walled carbon nanotubes are listed with its element "Carbon" (CAS-No: 7440-44-0); All other components are listed |

SECTION 16 Other information

Abbreviations and acronyms

| | |
|---------|---|
| CAS-No. | Chemical Abstract Service number |
| EC-No. | European Community number |
| EN | European Standard |
| LC50 | Median lethal concentration |
| NOAEL | No-Observed Adverse Effect Level |
| PNEC | Predicted No-Effect Concentration |
| REACH | Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| SDS | Safety Data Sheet |
| WGK | Water Hazard Class |
| OEL | Occupational Exposure Limit |
| STP | Sewage treatment plant |
| vPvB | Very Persistent and Very Bioaccumulative |
| DNEL | Derived-No Effect Level |
| IOELV | Indicative Occupational Exposure Limit Value |
| LOAEL | Lowest Observed Adverse Effect Level |
| N.O.S. | Not Otherwise Specified |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |

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Abbreviations and acronyms

| | |
|-------|---|
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| DMEL | Derived Minimal Effect level |
| IARC | International Agency for Research on Cancer |
| PBT | Persistent Bioaccumulative Toxic |
| IATA | International Air Transport Association |
| OECD | Organisation for Economic Co-operation and Development |
| NOEC | No-Observed Effect Concentration |
| NOAEC | No-Observed Adverse Effect Concentration |
| IMDG | International Maritime Dangerous Goods |
| LD50 | Median lethal dose |
| EC50 | Median effective concentration |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |

Revision : All recent revision(s) are noted by a bold triangle pointed to right '►'.

Disclaimer : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

SDS CN

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