**Product** VTV 740 Silicone Rubber

**Revision Date** 24/11/2016

Revision 1



# **Safety Data Sheet (SDS)**

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name VTV 740 Silicone Rubber Synonyms, Trade Names No information available.

### 1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified UsesTwo-component silicone rubber compound.Uses Advised AgainstNo uses advised against are identified.

### 1.3 Details of the Supplier of the Safety Data Sheet

**Supplier** Renishaw plc

Brooms Road Stone Business Park Stone, Staffordshire

ST15 0SH United Kingdom

Tel: +44 (0) 1785 285000 (during UK office hours 09:00 to 17:00 UTC).

Contact Person msds@renishaw.com

1.4 Emergency Telephone Number

**Emergency Telephone** 999 / 911 or local emergency number.

### **SECTION 2: HAZARDS IDENTIFICATION**

# 2.1 Classification of the Substance or Mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified Human Health Not classified Environment Not classified

#### 2.2 Label Elements

**Contains** Not applicable

Label in Accordance With (EC) No.

1272/2008

No pictogram required

Signal Word No Signal Word

Hazard Statements No hazard statements required

Precautionary Statements No precautionary statements required

# 2.3 Other Hazards

None known.

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

### 3.1 Substance

Not applicable.

#### 3.2 Mixtures

Name	Product Identifier	GHS Classification	%
TORGANOPOLYSII OXANE	CAS-No.: 918-383-6 EC No.:		60-100%

The Full Text for all Hazard Statements Are Displayed in Section 16.

**Composition Comments** The data shown are in accordance with the latest EC Directives.

### **SECTION 4: FIRST AID MEASURES**

#### 4.1 Description of First Aid Measures

General Information Provide general first aid, rest, warmth and fresh air. As a general rule, in case of doubt or if

symptoms persist, always call a doctor. Seek medical attention for all burns and eye injuries, regardless how minor they may seem. First aid personnel must be aware of own risk during

rescue.

**Inhalation** If this product is inhaled and symptoms occur, move the exposed person to fresh air

promptly. If breathing is difficult, give oxygen. Seek medical attention. Keep person warm

and at rest.

**Ingestion** If this product is ingested, remove victim immediately from source of exposure. Rinse mouth

thoroughly. Do not induce vomiting. Provide fresh air, warmth and rest, preferably in

 $comfortable\ upright\ sitting\ position.\ Get\ medical\ attention\ immediately!\ Never\ give\ anything$ 

by mouth to an unconscious person.

**Skin Contact** Immediately wash with water, preferably under a shower, removing contaminated clothing

while washing proceeds. Obtain medical attention if irritation persists or if blistering occurs.

Contaminated clothing should be washed before re-use.

Eye Contact Do not rub eye. If this product contacts the eyes, gently flush eyes with water for at least

fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Avoid contaminating unaffected eye. Remove contact lenses if present and easy to do so. Seek medical attention.

## 4.2 Most Important Symptoms and Effects, Both Acute and Delayed

General Information The severity of the symptoms described will vary dependent on the concentration and the

length of exposure.

InhalationNo specific symptoms noted.IngestionNo specific symptoms noted.Skin ContactNo specific symptoms noted.Eye ContactMay cause temporary eye irritation.

#### 4.3 Indication of any Immediate Medical Attention and Special Treatment Needed

**Notes to the Physician** Treat symptomatically.

### **SECTION 5: FIRE-FIGHTING MEASURES**

# 5.1 Extinguishing Media

**Extinguishing Media** Extinguish with foam, carbon dioxide or water fog.

Unsuitable Extinguishing Media High volume water jet.

## 5.2 Special Hazards Arising From the Substance or Mixture

**Hazardous Combustion Products** Fire may generate Irritating, toxic and corrosive gases.

 $\textbf{Unusual Fire \& Explosion Hazards} \qquad \text{No unusual fire or explosion hazards noted}.$ 

**Specific Hazards** If heated, harmful vapours may be formed. Floors may become slippery, avoid falls.

### **5.3 Advice for Firefighters**

**Special Fire Fighting Procedures** If possible, fight fire from protected position. Avoid breathing fire vapours. Ventilate closed

spaces before entering them. Keep up-wind to avoid fumes. Containers close to fire should be

 $removed\ immediately\ or\ cooled\ with\ water\ if\ safe\ to\ do\ so.$ 

**Protective Equipment for** 

**Firefighters** 

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard

EN 469 will provide a basic level of protection for chemical incidents.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### 6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Do not touch or walk through spilled material. Evacuate and ventilate area. Eliminate all

sources of ignition. Wear protective clothing as described in Section 8 of this safety data

Avoid inhalation of vapours and contact with skin and eyes. Provide adequate ventilation. In

case of inadequate ventilation, use respiratory protection. Keep unnecessary and

unprotected personnel from entering.

For Emergency Responders Follow safe handling advice and personal protective equipment recommendations for normal

use of product.

#### **6.2 Environmental Precautions**

**Environmental Precautions** Do not discharge onto the ground or into water courses.

# 6.3 Methods and Material for Containment and Cleaning Up

Spill Clean Up Methods Stop leak if possible without risk. DO NOT touch spilled material! Wear necessary protective

equipment. Ventilate and evacuate the area. Eliminate all sources of ignition. Wear

respirator if ventilation is not adequate.

Scrape up with rag or other material and place into suitable clean labelled container. In such a case be aware of generation of hydrogen gas by contaminants. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in

a suitably labelled container Wash work area with water.

#### 6.4 Reference to Other Sections

Reference to Other Sections See section 1 for emergency contact. For personal protection, see section 8. For waste

disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### 7.1 Precautions for Safe Handling

Handling Keep away from heat, sparks and open flame. Static electricity and formation of sparks must

be prevented. Do not eat, drink or smoke when using the product. Do not use contact lenses. Avoid contact with skin and eyes. Avoid inhalation of vapours. Avoid prolonged or repeated

contact. Provide good ventilation.

Wear personal protective equipment. Handle and open container with care. Do not mix with other chemicals. Observe good industrial hygiene practices. Vent container properly to

eliminate internal pressure. Do not return product to containers for reuse.

# 7.2 Conditions for Safe Storage, Including Any Incompatibilities

**Storage Precautions** Keep away from heat, sparks, direct sunlight and open flames. Store separately from acids,

alkalies and oxidising agents. Keep only in a vented container in a well ventilated area. Keep

container closed and store away from water or moisture.

Storage Class Chemical storage.

# 7.3 Specific End Use(s)

Specific End Use(s) The identified uses for this product are detailed in Section 1.

**Usage Description** Use only according to directions.

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **8.1 Control Parameters**

**Ingredient Comments** No exposure limits noted for ingredient(s).

#### **8.2 Exposure Controls**

### **Protective Equipment**

Respiratory Equipment

**Hand Protection** 



**Engineering Measures** Provide adequate ventilation, including appropriate local extraction.

Where risk assessment shows air-purifying respirators are appropriate a full face respirator conforming to EN143, and suitable respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards

such as CEN (EU).

Change filters frequently. Use respiratory protection as specified by an industrial hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Where hand contact with the product may occur the use of gloves approved to relevant

> standards (e.g. Europe: EN374) is recommended. Gloves must be inspected prior to use. Suggested material: Nitrile/Chloroprene. Consult manufacturer for specific advice. 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. Change gloves regularly. Selection of the glove material depends on consideration of the penetration times, rates of diffusion and

degradation, and concentration specific to the workplace.

**Eye Protection** Wear safety goggles or face shield to prevent any possibility of eye contact. Use equipment

for eye protection tested and approved under appropriate government standards such as EN

166(EU).

Other Protection Wear appropriate clothing to prevent any possibility of skin contact. Personal protective

equipment for the body should be selected based on the task being performed and the risks

involved and should be approved by a specialist.

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke **Hygiene Measures** 

during work. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Wash promptly if skin becomes wet or contaminated.

**Process Conditions** Ensure that eye flushing systems are located close by in the work place.

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### 9.1 Information on Basic Physical and Chemical Properties

Appearance Paste. Colour Milky white. Odour Odourless.

**Odour Threshold - Lower** No information available.

**Odour Threshold - Upper** No information available.

pH-Value, Conc. Solution No information available.

pH-Value, Diluted Solution No information available.

No information available. **Melting Point** 

**Initial Boiling Point and Boiling** 

Range

No information available.

Flash Point 200.00 °C

**Evaporation Rate** No information available.

Flammability State No information available.

Flammability Limit - Lower(%) No information available.

Flammability Limit - Upper(%) No information available.

No information available. Vapour Pressure

Vapour Density (air=1) No information available.

**Relative Density** 1.09g/cm3 @ 25.00 °C

Bulk Density No information available.

**Solubility** Insoluble.

**Decomposition Temperature** No information available.

Partition Coefficient; n-

Octanol/Water

No information available.

**Auto Ignition Temperature (°C)** No information available.

Viscosity 60 mPas 23.00

**Explosive Properties** Not classified as explosive.

Oxidising Properties No information available.

9.2 Other Information

Molecular Weight No information available.

**Volatile Organic Compound**No information available.

Other Information None noted.

### **SECTION 10: STABILITY AND REACTIVITY**

10.1 Reactivity

**Reactivity** Stable product under recommended storage and handling conditions.

10.2 Chemical Stability

Stability Stable under normal temperature conditions and recommended use.

10.3 Possibility of Hazardous Reactions

**Hazardous Reactions** Avoid contact with acidic, basic or oxidizing materials.

Hazardous Polymerisation May polymerise.
Polymerisation Description Unknown.

10.4 Conditions to Avoid

**Conditions to Avoid** Heat, sparks, open flames, temperature extremes and direct sunlight.

10.5 Incompatible Materials

Materials to Avoid Store separately from acids, alkalies, and oxidising agents. Avoid contact with metals and

water. Strong reducing agents, Alcohols. Metallic compounds.

**10.6 Hazardous Decomposition Products** 

Hazardous Decomposition Products Thermal decomposition or combustion may liberate carbon oxides and other harmful gases

or vapors. Silica. Carbon oxides and traces of incompletely burned carbon compounds.

Formaldehyde. Hydrogen.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1 Information on Toxicological Effects

**Toxicological Information** No toxicological information for the overall finished product.

Acute Toxicity (Oral LD50) No information available.

Acute Toxicity (Dermal LD50) No information available.
Acute Toxicity (Inhalation LD50) No information available.

**Serious Eye Damage/Irritation** May cause temporary eye irritation.

**Skin Corrosion/Irritation** No information available.

Respiratory SensitisationNo information available.Skin SensitisationNo information available.

**Germ Cell Mutagenicity** No information available.

**Carcinogenicity** No information available.

Specific Target Organ Toxicity - Single Exposure:

STOT - Single Exposure No information available.

Specific Target Organ Toxicity - Repeated Exposure:

**STOT - Repeated Exposure** No information available.

InhalationNo specific symptoms noted.IngestionNo specific symptoms noted.Skin ContactNo specific symptoms noted.Eye ContactMay cause temporary eye irritation.

Waste Management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

Routes of Entry No information available.

Target Organs No target organs specified.

**Aspiration Hazards:** No information available. **Reproductive Toxicity:** No information available.

# **SECTION 12: ECOLOGICAL INFORMATION**

## 12.1 Toxicity

Acute Toxicity - FishNo information available.Acute Toxicity - AquaticNo information available.

**Invertebrates** 

Acute Toxicity - Aquatic Plants
Acute Toxicity - Microorganisms
Chronic Toxicity - Fish
Chronic Toxicity - Aquatic
Invertebrates

No information available.
No information available.
No information available.

**Chronic Toxicity - Aquatic Plants Chronic Toxicity - Microorganisms**No information available.
No information available.

**Ecotoxicity** No Ecological information on the finished product.

**Eco Toxilogical Information** No ecological toxicity available on the overall finished product.

# 12.2 Persistence and Degradability

DegradabilityNo information available.Biological Oxygen DemandNo information available.Chemical Oxygen DemandNo information available.

# 12.3 Bioaccumulative Potential

**Bioaccumulative Potential** No data available on bioaccumulation.

Bioacculmation Factor No information available.
Partition Coefficient: n- No information available.

Octanol/Water

#### 12.4 Mobility in Soil

**Mobility** No information available.

#### 12.5 Results of PBT and vPvB Assessment

Results of PBT and vPvB Assessment No information available.

### 12.6 Other Adverse Effects

Other Adverse Effects No information available.

### **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste Management When handling waste, consideration should be made to the safety precautions applying to

handling of the product.

#### **13.1 Waste Treatment Methods**

**Disposal Methods** Dispose of waste and residues in accordance with local authority requirements, and in

accordance with all local, national and international regulations. For waste disposal, use a

licensed industrial waste disposal agent.

### **SECTION 14: TRANSPORT INFORMATION**

#### 14.1 UN Number

UN No. (ADR) Not applicable.
UN No. (IMDG) Not applicable.
UN No. (IATA) Not applicable.

## 14.2 UN Proper Shipping Name

ADR Proper Shipping Name
IMDG Proper Shipping Name
Not applicable.
IATA Proper Shipping Name
Not applicable.

### 14.3 Transport Hazard Class(es)

ADR Class Not applicable.

IMDG Class Not applicable.

IATA Class Not applicable.

Transport Labels Not applicable

## 14.4 Packing Group

ADR/RID/ADN Packing Group

IMDG Packing Group

IATA Packing Group

Not applicable.

Not applicable.

# 14.5 Environmental Hazards

 ADR
 No

 IMDG
 No

 IATA
 No

### 14.6 Special Precautions for User

EMS Not applicable.
Emergency Action Code Not applicable.
Hazard No. (ADR) Not applicable.
Tunnel Restriction Code Not applicable.

## 14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

#### **SECTION 15: REGULATORY INFORMATION**

### 15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

EU Legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16

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December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. The UN Globally Harmonized System (GHS) Safety Data Sheet format (Annex IV) is implemented as Annex II of REACH EU No 453/2010 of 20th

May 2010 amending regulation (EC) No 1907/2006.

**Approved Code of Practice** Workplace Exposure Limits Guidance Note EH40/2005.

**Chemical Safety Assessment** No chemical safety assessment has been carried out.

## **SECTION 16: OTHER INFORMATION**

**General Information** This Safety Data Sheet is in accordance with Reach Regulation (EC) No 453/2010.

**Revision Comments** This is a first issue. **Revision Date** 24/11/2016

Revision 1

Safety Data Sheet Status Approved.

### **Hazard Statements In Full**

#### Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.