

# TIM THERMAL PASTE H1 COMPONENT B



## SAFETY DATA SHEET

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as retained and amended in UK law

ISSUE DATE: 20.02.2024  
REVISION DATE: 20.02.2024

VERSION: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : TIM Thermal Paste H1 Component B  
Product code : Ford Internal Ref: 512163  
SDS Number : 11702  
Product use : Professional use

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

##### 1.2.1. Relevant identified uses

Function or use category : Thermal Conductive Material

##### 1.2.2. Uses advised against

Restrictions on use : None known

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Ford-Werke GmbH  
Edsel-Ford-Str. 2-14  
50769 Cologne  
Germany  
+49 221 90-33333  
sdseu@ford.com

##### Distributor

Ford Motor Company Ltd.  
Parts Distribution Centre  
Royal Oak Way South  
NN11 8NT Daventry, Northants  
United Kingdom  
+44 1327 305 198

#### 1.4. Emergency telephone number

+49 (0) 6132-84463 (GBK GmbH – 24/7)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

This mixture does not meet the criteria for classification according to Regulation (EC) 1272/2008 as amended.

#### 2.2. Label elements

##### Labelling according to The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations

EUH-statements EUH208 - Contains Trimethoxyvinylsilane. May produce an allergic reaction.  
EUH210 - Safety data sheet available on request.

#### 2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Notes
Trimethoxyvinylsilane	2768-02-7 220-449-8 014-049-00-0 01-2119513215-52-XXXX	0,1 - < 1	Flam. Liq. 3, H226 Acute Tox. 4 (Inhalation), H332 (ATE=11 mg/l) Skin Sens. 1B, H317 STOT RE 2, H373	

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures general : Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
- First-aid measures after skin contact : Wash skin with soap and water. Get medical attention if irritation develops and persists.
- First-aid measures after eye contact : Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
- First-aid measures after ingestion : Do not induce vomiting. Rinse mouth thoroughly. Get immediate medical advice/attention.

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

- Symptoms/effects: : In case of repeated or prolonged exposure : May cause eye irritation, May cause skin irritation.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

- Suitable extinguishing media : Dry chemical, CO<sub>2</sub>, or water spray or regular foam.
- Unsuitable extinguishing media : Do not use water jet as an extinguisher, as this will spread the fire.

### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : Cool containers / tanks with spray water if possible.
- Hazardous decomposition products in case of fire : During fire, gases hazardous to health may be formed. Carbon oxides (CO, CO<sub>2</sub>). Silicon dioxide.

### 5.3. Advice for firefighters

- Firefighting instructions : Move containers from fire area if it can be done without personal risk. Use standard firefighting procedures and consider the hazards of other involved materials.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Eliminate every possible source of ignition.

#### 6.1.1. For non-emergency personnel

- Protective equipment : Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the MSDS.
- Emergency procedures : Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate protective equipment and clothing during clean-up.

### 6.1.2. For emergency responders

- Protective equipment : Wear recommended personal protective equipment. For personal protection, see section 8 of the SDS.
- Emergency procedures : Keep unnecessary personnel away. Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment. Avoid discharge into drains, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel of all environmental releases.

### 6.3. Methods and material for containment and cleaning up

- For containment : Stop leak without risks if possible. Move containers from fire area if it can be done without personal risk.
- Methods for cleaning up : Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Following product recovery, flush area with water. Small spills: Wipe up with absorbent material (for example cloth). Clean surface thoroughly to remove residual contamination. Never return spills in original containers for re-use.
- Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of residues refer to section 13 : "Disposal considerations".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment. Avoid breathing vapours, mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment.
- Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Observe good industrial hygiene practices.

### 7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Ensure adequate ventilation, especially in confined areas.
- Storage conditions : Store locked up. Store in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

Thermal Conductive Material.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. National occupational exposure and biological limit values

##### Exposure limit values for the other components

##### Aluminium oxides (1344-28-1)

##### United Kingdom - Occupational Exposure Limits

Local name	Aluminium oxides
WEL TWA (OEL TWA)	10 mg/m <sup>3</sup> inhalable dust 4 mg/m <sup>3</sup> respirable dust
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

#### 8.1.2. Recommended monitoring procedures

No additional information available

#### 8.1.3. Air contaminants formed

No additional information available

#### 8.1.4. DNEL and PNEC

##### Trimethoxyvinylsilane (2768-02-7)

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###### DNEL/DMEL (Workers)

Acute - systemic effects, inhalation	73.6 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.91 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	27.6 mg/m <sup>3</sup>

###### DNEL/DMEL (General population)

Acute - systemic effects, inhalation	54.4 mg/m <sup>3</sup>
Long-term - systemic effects, oral	0.63 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	6.8 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	0.63 mg/kg bodyweight/day

###### PNEC (Water)

PNEC aqua (freshwater)	0.4 mg/l
PNEC aqua (marine water)	0.04 mg/l
PNEC aqua (intermittent, freshwater)	1.21 mg/l

###### PNEC (Sediment)

PNEC sediment (freshwater)	1.5 mg/kg dwt
PNEC sediment (marine water)	0.15 mg/kg dwt

###### PNEC (Soil)

PNEC soil	0.06 mg/kg dwt
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#### 8.1.5. Control banding

No additional information available

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

##### Appropriate engineering controls:

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

#### 8.2.2. Personal protection equipment

##### Personal protective equipment:

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment.

##### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses with side shields. EN 166.

##### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing. EN 14605. EN ISO 13982

###### Hand protection:

Protective gloves. ISO 374-1. The recommendation is only valid for the supplied product and the stated application. Special working conditions, like heat or mechanical strain, which deviate from the test conditions, can reduce the protective effect provided by the recommended glove

Material	Permeation	Thickness (mm)	Comments
Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see <a href="http://www.kcl.de">www.kcl.de</a> ) or comparable product.
In case of splash contact:	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH,

**Other skin protection****Materials for protective clothing:**

Personal protective equipment should be chosen according to the CEN standards and in discussion with the supplier of the protective equipment

**8.2.2.3. Respiratory protection****Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. EN 14387

**8.2.2.4. Thermal hazards****Thermal hazard protection:**

Wear appropriate thermal protective clothing, when necessary.

**8.2.3. Environmental exposure controls****Environmental exposure controls:**

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

**Other information:**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state	: Liquid
Colour	: White.
Appearance	: Liquid.
Odour	: None.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: < -50 °C
Boiling point	: > 200 °C
Flammability	: Not flammable
Explosive properties	: Not applicable.
Explosive limits	: Not available
Lower explosive limit (LEL)	: Not available
Upper explosive limit (UEL)	: Not available
Flash point	: > 93 °C
Auto-ignition temperature	: > 200 °C
Decomposition temperature	: Not applicable
pH	: Not applicable
Viscosity, kinematic	: > 20.5 mm <sup>2</sup> /s @ 40°C
Viscosity, dynamic	: 400000 mPa·s
Solubility	: insoluble in water.
Log Kow	: Not applicable
Vapour pressure	: < 0.1 hPa @ 20°C
Vapour pressure at 50°C	: Not available
Density	: 3.1 g/cm <sup>3</sup> @25°C
Relative density	: > 1 @20°C
Relative vapour density at 20°C	: Not available
Particle size	: Not applicable
Particle size distribution	: Not applicable
Particle shape	: Not applicable
Particle aspect ratio	: Not applicable
Particle aggregation state	: Not applicable
Particle agglomeration state	: Not applicable
Particle specific surface area	: Not applicable
Particle dustiness	: Not applicable

## 9.2. Other information

### 9.2.1. Information with regard to physical hazard classes

No additional information available

### 9.2.2. Other safety characteristics

VOC content : < 3 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reacts with (strong) oxidizers. Reacts with (some) acids/bases.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Excessive heat. None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Oxidising agents. Acids. Bases.

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Based on available data, the classification criteria are not met  
Acute toxicity (dermal) : Based on available data, the classification criteria are not met  
Acute toxicity (inhalation) : Based on available data, the classification criteria are not met

Trimethoxyvinylsilane (2768-02-7)	
LC50 Inhalation - Rat (Vapours)	16.8 mg/l/4h
Skin corrosion/irritation	: Based on available data, the classification criteria are not met pH: Not applicable
Serious eye damage/irritation	: Based on available data, the classification criteria are not met pH: Not applicable
Respiratory or skin sensitisation	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Based on available data, the classification criteria are not met
Carcinogenicity	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Based on available data, the classification criteria are not met
STOT-single exposure	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Based on available data, the classification criteria are not met
Trimethoxyvinylsilane (2768-02-7)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Based on available data, the classification criteria are not met
TIM Thermal Paste H1 Component B	
Viscosity, kinematic	> 20.5 mm <sup>2</sup> /s @ 40°C

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

#### 11.2.2. Other information

Potential adverse human health effects and symptoms : Methanol released during polymerisation of RTV silicones is toxic by inhalation. It is also highly flammable  
Other information : Information on Effects: refer to section 4

## SECTION 12: Ecological information

### 12.1. Toxicity

- Ecology - general : The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.
- Hazardous to the aquatic environment, short-term (acute) : Based on available data, the classification criteria are not met
- Hazardous to the aquatic environment, long-term (chronic) : Based on available data, the classification criteria are not met

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

#### TIM Thermal Paste H1 Component B

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Log Kow Not applicable

#### Trimethoxyvinylsilane (2768-02-7)

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Log Kow 1.1

### 12.4. Mobility in soil

#### TIM Thermal Paste H1 Component B

Ecology - soil Hardened adhesives are immobile.

### 12.5. Results of PBT and vPvB assessment

#### TIM Thermal Paste H1 Component B

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

Other adverse effects : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

- Regional waste regulation : Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations.
- Waste treatment methods : Collect and reclaim or dispose in closed containers at licensed waste disposal site. Do not contaminate ponds, waterways or ditches with chemical or used container. Do not allow to enter drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.
- European List of Waste (LoW, EC 2000/532) : The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.  
08 04 09\* - waste adhesives and sealants containing organic solvents or other dangerous substances  
15 01 10\* - packaging containing residues of or contaminated by dangerous substances

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

Not regulated for transport

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

##### EU restriction list (REACH Annex XVII)

Reference code	Applicable on
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3(a)	Trimethoxyvinylsilane
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3(b)	Trimethoxyvinylsilane
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40.	Trimethoxyvinylsilane
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Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

VOC content : < 3 %

Other information, restriction and prohibition regulations : Directive 94/33/EC on the protection of young people at work, as amended. Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work, as amended. Directive 92/85/EEC on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding as amended. For details, refer to section 3 and 8.

##### Directive 2012/18/EU (SEVESO III)

Seveso Additional information : Not applicable

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

#### Indication of changes:

None.

#### Abbreviations and acronyms

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
STEL	Short-term Exposure Limit
VOC	Volatile organic compounds
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
STP	Sewage treatment plant
TLM	Median Tolerance Limit
vPvB	Very Persistent and Very Bioaccumulative
OEL	Occupational Exposure Limit



RRN REACH Registration no.  
TWA Time Weighted Average. The average concentration of a chemical in air over the total exposure time-usually an 8-hour workday.

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 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.

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

#### Full text of H- and EUH-statements

Acute Tox. 4 (Inhalation) Acute toxicity (inhal.), Category 4  
EUH208 Contains Trimethoxyvinylsilane. May produce an allergic reaction.  
EUH210 Safety data sheet available on request.  
Flam. Liq. 3 Flammable liquids, Category 3  
H226 Flammable liquid and vapour.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H373 May cause damage to organs through prolonged or repeated exposure.  
Skin Sens. 1B Skin sensitisation, category 1B  
STOT RE 2 Specific target organ toxicity – Repeated exposure, Category 2

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.*



## Attachment to the Safety Data Sheet

**Product Name:** TIM Thermal Paste H1 Component B

**Ford Int. Ref. No.:** 512163

**Revision Date:** 20.02.2024

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### Involved Products:

Finiscode	Part number	Container Size:
1	PU7J 10D704 BA	200 ml
<b>Part of Kit:</b> 2 772 733	PU7J 10D704 CA	TIM Kit H1 – 2 Component