TIM THERMAL PASTE H1 COMPONENT A

SAFETY DATA SHEET

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



ISSUE DATE: 19.02.2024 REVISION DATE: 19.02.2024

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 A
Product code	: Ford Internal Ref: 512164
SDS Number	: 11700
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	Distributor
Ford-Werke GmbH	Ford Motor Company Ltd.
Edsel-Ford-Str. 2-14	Parts Distribution Centre
50769 Cologne	Royal Oak Way South
Germany	NN11 8NT Daventry, Northants
+49 221 90-33333	United Kingdom
sdseu@ford.com	+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

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

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

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of REACH annex II.

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	: Take off immediately all contaminated clothing and wash it before reuse. Wash immediately with plenty of water. Get medical advice/attention.		
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			

No additional information available

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	:	All types of fire extinguishers are suitable.
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

Hazardous decomposition products in case of fire	: During fire, gases hazardous to health may be formed. Silicon dioxide. Nitrogen oxides. Carbon oxides (CO, CO2).
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

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. Spill area may be slippery.
Methods for cleaning up	: Mechanically recover the product.
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.
Storage temperature	:	10 – 30 °C

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/m³ inhalable dust 4 mg/m³ 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			
No additional information available			
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 www.kcl.de) or comparable product.
In case of splash contact: Nitrile rubber (NBR)	6 (> 480 minutes)	0,4	Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

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 Colour Appearance Odour Odour threshold Melting point Freezing point Boiling point Flammability Explosive properties Explosive limits Lower explosive limit (LEL) Upper explosive limit (UEL) Flash point Auto-ignition temperature Decomposition temperature	 Solid Black. Paste. Characteristic. Not available Not available Not available Not available Not available Not available Not applicable
Flash point	: Not applicable
-	
pH solution Viscosity, kinematic	Not availableNot applicable
Viscosity, dynamic Solubility	: 200 – 1300 mPa·s @ 25 °C (77 °F) : Not available
Log Kow Vapour pressure	: Not applicable : Not available

Vapour pressure at 50°C	: Not available
Density	: 2.9 – 3.1 g/cm³ @ 23 °C (73,4 °F)
Relative density	: Not applicable
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

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	: 0%

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

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

No additional information available

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
Skin corrosion/irritation	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Based on available data, the classification criteria are not met
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
Aspiration hazard	: Based on available data, the classification criteria are not met

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Viscosity, kinematic

Not applicable

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

Hazardous to the aquatic environment, short-term (acute) Hazardous to the aquatic environment, long-term (chronic)

: 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. : Based on available data, the classification criteria are not met

: Based on available data, the classification criteria are not met

Not applicable

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

TIM Thermal Paste H1 Component A

Log Kow

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

TIM Thermal Paste H1 Component A

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 10 - waste adhesives and sealants other than those mentioned in 08 04 09 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

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions) 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) Product code: Ford Internal Ref: 512164 GB - en

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

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

0 % :

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.		
<u> </u>			

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 A

Ford Int. Ref. No.: 512164

Revision Date: 19.02.2024

Involved Products:

Finiscode	Part number	Container Size:
. 1	PU7J 10D704 AA	200 ml
Part of Kit:		
2 772 733	PU7J 10D704 CA	TIM Kit H1 – 2 Component