



METAL ADHESIVE H COMPONENT B

SAFETY DATA SHEET

according to Regulation (EU) 2015/830

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

1.1. Product identifier

Trade name	Metal Adhesive H Component B
Product code	Ford Internal Ref.: 193356
SDS Number	5654
Product use	Professional use

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

Relevant identified uses	Adhesives, sealants
Uses advised against	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)

2. SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008

Health hazards			
Acute toxicity (oral), Category 4	H302		Harmful if swallowed.
Skin corrosion/irritation, Category 1B	H314		Causes severe skin burns and eye damage.
Serious eye damage/eye irritation, Category 1	H318		Causes serious eye damage.
Skin sensitisation, Category 1	H317		May cause an allergic skin reaction.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335		May cause respiratory irritation.
Specific target organ toxicity — Repeated exposure, Category 2	H373		May cause damage to organs (kidneys, liver) through prolonged or repeated exposure (oral).
Environmental hazards	H411		Toxic to aquatic life with long lasting effects.
Hazardous to the aquatic environment — Chronic Hazard, Category 2			

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms



Signal word

Danger

Contains

Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia; Formaldehyde, polymer with benzenamine, hydrogenated; 4,4'-methylenebis(cyclohexylamine); fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines

Hazard statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H373	May cause damage to organs (kidneys, liver) through prolonged or repeated exposure (oral).
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P260	Do not breathe Aerosol.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing, eye protection, face protection.

Response

P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER, a doctor.
P391	Collect spillage.

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.

3. 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	Notes
Poly(oxy-1,4-butanediyl), alpha-hydro-omega- hydroxy-, polymer with ammonia	960525-56-8 680-355-1	20 - 40	Acute Tox. 4 (Oral), H302 Skin Corr. 1C, H314 STOT SE 3, H335 Aquatic Chronic 3, H412	

Chemical name	CAS- No EC- No Index No RRN	%	Classification according to Regulation (EC) No. 1272/2008	Notes
Formaldehyde, polymer with benzenamine, hydrogenated	135108-88-2 603-894-6 01-2119983522-33- XXXX	10 - 20	Acute Tox. 3 (Oral), H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 Aquatic Chronic 3, H412	UVCB
4,4'- methylenebis(cyclohexyla mine)	1761-71-3 217-168-8 01-2119541673-38- XXXX	10 - 20	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373	
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia	9046-10-0 618-561-0 01-2119557899-12- XXXX	10 - 20	Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	UVCB
fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines	68410-23-1 614-452-7	10 - 20	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	UVCB
1,3-bis[3- (dimethylamino)propyl]ure a	52338-87-1 257-861-2 01-2120781639-37- XXXX	1 - < 5	Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	
3- aminopropyldimethylamine	109-55-7 203-680-9 612-061-00-6 01-2119486842-27- XXXX	1 - < 5	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT SE 3, H335	
Amines, polyethylenepoly- , triethylenetetramine fraction	90640-67-8 292-588-2 01-2119487919-13- XXXX	1 - < 3	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Chronic 3, H412	

UVCB: Substances of Unknown or Variable composition, Complex reaction products or Biological materials

Full text of H-statements: see section 16

4. SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
Skin contact:	Take off contaminated clothing and wash it before reuse. Wash immediately with plenty of water. Get medical advice/attention.
Eyes 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.
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 after inhalation	Inhalation may cause irritation (cough, short breathing, difficulty in breathing).
Symptoms/effects after skin contact	Causes severe skin burns and eye damage. May cause an allergic skin reaction. irritation (itching, redness, blistering).
Symptoms/effects after eye contact	Causes serious eye damage. Conjunctivitis. Eye irritation.
Symptoms/effects after ingestion	Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Abdominal pain, nausea. Vomiting. Diarrhea.
Chronic symptoms	May cause damage to organs through prolonged or repeated exposure.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

5. SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Foam, carbon dioxide (CO ₂), powder, water spray.
Unsuitable extinguishing media	Do not use a water jet since it may cause the fire to spread.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	Toxic fumes may be released. Carbon oxides (CO, CO ₂). Nitrogen oxides.
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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.

6. SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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.

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 the flow of material, if this is without risk. Move containers from fire area if it can be done without personal risk.
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".

7. SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling Ensure good ventilation of the work station. Wear personal protective equipment. Avoid release to the environment. Avoid contact with skin, eyes and clothing. Protect material from direct sunlight. Observe good industrial hygiene practices.
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.
Incompatible materials Alkalines. Strong oxidizing agent. Strong reducing agents.
Storage temperature 15 – 35 °C

7.3. Specific end use(s) Adhesives, sealants.

8. SECTION 8: Exposure controls/personal protection

8.1. Control parameters

United Kingdom

Regulation	Substance	Type	Value
EH40. HSE	Talc (Mg3H2(SiO3)4) (14807-96-6) Talc	WEL TWA	1 mg/m³ respirable dust

DNEL: Derived no effect level

No data available

Components	Type	Route	Value	Form
Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	Worker	Dermal	6 mg/kg bodyweight/day	Acute - systemic effects
		Inhalation	2 mg/m³	Acute - systemic effects
		Dermal	2 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.2 mg/m³	Long-term - systemic effects
4,4'-methylenebis(cyclohexylamine) (1761-71-3)	Worker	Dermal	0.1 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	1 mg/m³	Long-term - systemic effects
	Consumer	Oral	0.06 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.21 mg/m³	Long-term - systemic effects
		Dermal	0.06 mg/kg bodyweight/day	Long-term - systemic effects

Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)	Worker	Dermal	2.5 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	1.36 mg/m ³	Long-term - systemic effects
1,3-bis[3-(dimethylamino)propyl]urea (52338-87-1)	Worker	Dermal	4.8 mg/kg bw/day	Acute - systemic effects
		Inhalation	17.4 mg/m ³	Acute - systemic effects
		Dermal	2.33 mg/kg bw/day	Long-term - systemic effects
		Inhalation	5.8 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.833 mg/kg bw/day	Long-term - systemic effects
3-aminopropyl dimethylamine (109-55-7)	Worker	Inhalation	1.2 mg/m ³	Long-term - systemic effects
		Inhalation	1.2 mg/m ³	Long-term - local effects
Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)	Worker	Inhalation	0.054 mg/m ³	Long-term - systemic effects
	Consumer	Oral	0.14 mg/kg bodyweight/day	Long-term - systemic effects
		Inhalation	0.096 mg/m ³	Long-term - systemic effects

PNEC: Predicted no effect concentration

No data available

Components	Type	Route	Value	Form
Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	Not applicable	Freshwater	0.015 mg/l	
		Seawater	0.002	
		Freshwater	0.15 mg/l	Intermittent release
		sediment	15 mg/kg dwt	Freshwater
		sediment	1.5 mg/kg dwt	Seawater
		Soil	1.8 µg/kg dw	
		STP	1.9 mg/l	
4,4'-methylenebis(cyclohexylamine) (1761-71-3)	Not applicable	Freshwater	0.08 mg/l	
		Seawater	0.008 mg/l	
		Freshwater	0.08 mg/l	Intermittent release
		sediment	137 mg/kg dwt	Freshwater
		sediment	13.7 mg/kg dwt	Seawater
		Soil	27.2 mg/kg dwt	
		STP	3.2 mg/l	
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)	Not applicable	Freshwater	0.015 mg/l	
		Seawater	0.014 mg/l	
		Freshwater	0.15 mg/l	Intermittent release
		sediment	0.132 mg/kg dwt	Freshwater
		sediment	0.125 mg/kg dwt	Seawater
		Soil	0.018 mg/kg dwt	
		Oral	6.93 kg/kg food	Secondary Poisoning
STP	7.5 mg/l			
1,3-bis[3-(dimethylamino)propyl]urea (52338-87-1)	Not applicable	Freshwater	93 µg/L	
		Seawater	9.3 µg/L	
		Freshwater	0.93 mg/l	Intermittent release
		Seawater	93 µg/L	Intermittent release
		sediment	0.372 mg/kg dwt	Freshwater
		sediment	37.2 µg/kg dw	Seawater

		Soil	19.8 µg/kg dw	
		STP	1.8 mg/l	
3-aminopropylidimethylamine (109-55-7)	Not applicable	Freshwater	0.073 mg/l	
		Seawater	0.007 mg/l	
		Freshwater	0.34 mg/l	Intermittent release
		sediment	0.735 mg/kg dwt	Freshwater
		sediment	0.073 mg/kg dwt	Seawater
		Soil	0.104 mg/kg dwt	
		STP	69.5 mg/l	
Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)	Not applicable	Freshwater	0.027 mg/l	
		Seawater	0.003 mg/l	
		Freshwater	0.2 mg/l	Intermittent release
		Seawater	0.02 mg/l	Intermittent release
		sediment	8.572 mg/kg dwt	Freshwater
		sediment	0.857 mg/kg dwt	Seawater
		Soil	1.25 mg/kg dwt	
STP	0.13 mg/l			

8.2. Exposure 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

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

Individual protection measures, such as personal protective equipment (PPE)

Eye protection

Safety glasses with side shields. EN 166.

Skin protection

Hand protection

Protective gloves. EN 374. 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 protective 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.

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. Extra personal protection: A/P2 filter respirator for organic vapour and harmful dust

Skin and body protection	Wear suitable protective clothing, Long sleeved protective clothing, EN 14605, EN ISO 13982
Thermal hazard protection	Wear appropriate thermal protective clothing, when necessary.
Environmental exposure controls	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases.

9. SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Paste.
Colour	Grey.
Odour	Characteristic.
Odour threshold	No data available
pH	No data available
Relative evaporation rate (butylacetate=1)	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	0.9 – 1.1 g/cm ³ @ 20°C (68 °F)
Solubility	No data available
Log Pow	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	1000 – 3000 mPa·s
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

VOC (EU)	0 %
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10. 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	Refer to Section 10 on Incompatible Materials.
10.5. Incompatible materials	Strong oxidizing agents.

10.6. Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products should not be produced. During fire, gases hazardous to health may be formed.

11. SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Harmful if swallowed.

Mixture

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
Metal Adhesive H Component B	(calculated value)	ATE	oral	300 - < 2000	mg/kg bw		
	(calculated value)	ATE	Dermal	> 2000	mg/kg bw		

Substance

Name	Method	Type	Exposure route	Value	Unit	Species	Remarks
Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia (960525-56-8)	(acc. CLP 3.1.2)	ATE	oral	500	mg/kg bw		
Formaldehyde, polymer with benzenamine, hydrogenated (135108-88-2)	(OECD 423 method)	LD50	oral	300	mg/kg bw	rat	
4,4'-methylenebis(cyclohexylamine) (1761-71-3)	EPA OPP 81-1	LD50	oral	380	mg/kg bw	rat	
3-aminopropyl dimethylamine (109-55-7)	(OECD 401 method)	LD50	oral	410	mg/kg bw	rat	
	(acc. CLP 3.1.2)	ATE	Dermal	1100	mg/kg bw		
Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)	(OECD 401 method)	LD50	oral	1716	mg/kg bw	rat	
	(OECD 402 method)	LD50	Dermal	1465	mg/kg bw	rabbit	

Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/irritation Causes serious eye damage.

Respiratory or skin sensitisation May cause an allergic skin reaction. Amines. Exposure may produce an allergic reaction.

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 May cause respiratory irritation.

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

Potential adverse human health effects and symptoms Exposure may produce an allergic reaction. Information on Effects: refer to section 4.

12. SECTION 12: Ecological information

12.1. Toxicity

Ecology - general Toxic to aquatic life with long lasting effects.

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

Substance / Product	Trophic level	Species	Type	Value	Duration	Remarks
Formaldehyde, polymer with benzenamine,	Fish		LC50	63 mg/L	96 h	
	aquatic	Daphnia	EC50	15.4 mg/L	48 h	

hydrogenated (135108-88-2)	invertebrates	magna					
Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia (9046-10-0)	Fish	Cyprinodon variegatus (sheepshead minnow)	LC50	772,14 mg/L	96 h		(OECD 203 method)
	aquatic invertebrates	Daphnia magna	EC50	80 mg/L	48 h		(OECD 202 method)
1,3-bis[3-(dimethylamino)propyl]urea (52338-87-1)	Fish	Oryzias latipes (Ricefish)	LC50	> 1000 mg/L	96 h		(OECD 203 method)
	aquatic invertebrates	Daphnia magna	EC50	93 mg/L	48 h		(OECD 202 method)
	algae	Pseudokirchnerella subcapitata	EC50	> 100 mg/L	72 h		(OECD 201 method)
	microorganisms	activated sludge	EC50	820 mg/L	3 h		(OECD 209 method)
Amines, polyethylenepoly-, triethylenetetramine fraction (90640-67-8)	Fish	Pimephales promelas	LC50	330 mg/L	96 h		
	aquatic invertebrates	Daphnia magna	EC50	31.1 mg/L	48 h		

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available.

12.5. Results of PBT and vPvB assessment

Metal Adhesive H 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. 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.

13. SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)

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.

Sewage disposal recommendations

Do not contaminate ponds, waterways or ditches with chemical or used container.

Product/Packaging disposal recommendations

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Additional information	Dispose in accordance with all applicable regulations.
European List of Waste (LoW) code	
08 04 09*	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. waste adhesives and sealants containing organic solvents or other dangerous substances
15 01 10*	packaging containing residues of or contaminated by dangerous substances

14. SECTION 14: Transport information

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

14.1. UN number

UN-No. (ADR)	3259
UN-No. (IMDG)	3259
UN-No. (IATA)	3259
UN-No. (ADN)	3259
UN-No. (RID)	3259

14.2. UN proper shipping name

Proper Shipping Name (ADR)	AMINES, SOLID, CORROSIVE, N.O.S. (4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)
Proper Shipping Name (IMDG)	AMINES, SOLID, CORROSIVE, N.O.S. (4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)
Proper Shipping Name (IATA)	Amines, solid, corrosive, n.o.s. (4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)
Proper Shipping Name (ADN)	AMINES, SOLID, CORROSIVE, N.O.S. (4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)
Proper Shipping Name (RID)	AMINES, SOLID, CORROSIVE, N.O.S. (4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia)

14.3. Transport hazard class(es)

ADR	
Transport hazard class(es) (ADR)	8
Danger labels (ADR)	8
IMDG	
Transport hazard class(es) (IMDG)	8
Danger labels (IMDG)	8
IATA	
Transport hazard class(es) (IATA)	8
Hazard labels (IATA)	8
ADN	
Transport hazard class(es) (ADN)	8
Danger labels (ADN)	8
RID	
Transport hazard class(es) (RID)	8
Danger labels (RID)	8

14.4. Packing group

Packing group (ADR)	II
Packing group (IMDG)	II
Packing group (IATA)	II
Packing group (ADN)	II
Packing group (RID)	II

14.5. Environmental hazards

Dangerous for the environment	Yes
Marine pollutant	Yes
Other information	No supplementary information available.

14.6. Special precautions for user

Overland transport

Classification code (ADR)	C8
Special provisions (ADR)	274
Limited quantities (ADR)	1kg
Packing instructions (ADR)	P002, IBC08
Hazard identification number (Kemler No.)	80
Tunnel restriction code (ADR)	E
EAC code	2X

Transport by sea

Special provisions (IMDG)	274
Packing instructions (IMDG)	P002
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-B
Stowage category (IMDG)	A

Air transport

PCA Excepted quantities (IATA)	E2
PCA Limited quantities (IATA)	Y844
PCA limited quantity max net quantity (IATA)	5kg
PCA packing instructions (IATA)	859
PCA max net quantity (IATA)	15kg
CAO packing instructions (IATA)	863
CAO max net quantity (IATA)	50kg
Special provisions (IATA)	A3, A803
ERG code (IATA)	8L

Inland waterway transport

Classification code (ADN)	C8
Special provisions (ADN)	274
Limited quantities (ADN)	1 kg

Rail transport

Classification code (RID)	C8
Special provisions (RID)	274
Limited quantities (RID)	1kg
Packing instructions (RID)	P002, IBC08
Hazard identification number (RID)	80

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

IBC code Not applicable.

15. SECTION 15: Regulatory information

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

EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006

3-aminopropyl dimethylamine	3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F
Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia ; Formaldehyde, polymer with benzenamine, hydrogenated ; 4,4'-methylenebis(cyclohexylamine) ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia ; fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ; 1,3-bis[3-(dimethylamino)propyl]urea ; 3-aminopropyl dimethylamine ; Amines, polyethylenepoly-, triethylenetetramine fraction	3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia ; Formaldehyde, polymer with benzenamine, hydrogenated ; Reaction products of di-, tri- and tetra-propoxylated propane-1,2-diol with ammonia ; fatty acids, C18-unsatd., dimers, reaction products with polyethylenepolyamines ; 1,3-bis[3-(dimethylamino)propyl]urea ; Amines, polyethylenepoly-, triethylenetetramine fraction	3(c) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1
3-aminopropyl dimethylamine	40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.
Contains no substance on the REACH candidate list	
Contains no REACH Annex XIV substances	

VOC (EU)

0 %

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.

Seveso Information

E2 Hazardous to the Aquatic Environment in Category Chronic 2

National regulations

No additional information available.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

16. SECTION 16: Other information

Indication of changes

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
AGW	Occupational exposure limit value
ATE	Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)
BAM	Federal Institute for Materials Research and Testing, Germany
BAT	Maximum permissible concentration of biological working substances.
BCF	Bio-concentration factor.
BLV	Biological limit values
BLV	Biological limit values (BGW, Austria)
BMGV	Biological Monitoring Guidance Value (EH40,UK).
BOD5	Biochemical oxygen demand within 5 days
BOD	Biochemical oxygen demand
bw	Body weight.
calcd.	Calculated
CAS	Chemical Abstract Service.
CEN	European Committee for Standardization
CESIO	European Committee on Organic Surfactants and their Intermediates.
COD	Chemical oxygen demand
CLP	Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.
CMR	Carcinogenic, Mutagenic or Reproduction Toxic Substances
CSA	Chemical safety assessment
CSR	Chemical Safety Report.
DMEL	Derived Minimum Effect Level.
DNEL	Derived no effect level
EAC	European waste catalogue
EC	European community
EC50	Effective concentration
EINECS	European Inventory of Existing Commercial Chemical Substances.
ELINCS	European List of Notified Chemical Substances.
EN	European norm.
ERC	ERC (Environmental Release category)
EU	European Union
GLP	Good Laboratory Practice.
GHS	Globally Harmonized System of Classification and Labeling of Chemicals.
GW/VL	Occupational exposure limit value.
GW-kw/VL-cd	Occupational exposure limit value - short term.
GW-M/VL-M	Occupational exposure limit value – "Ceiling".
IATA	International Air Transport Association
IBC code	International Bulk Chemical (Code) (International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk).
ICAO	International Civil Aviation Organization
IC50	Inhibition Concentration 50%.
IECSC	Inventory of Existing Chemical Substances in China.

IMDG	International Maritime Dangerous Goods
ISO	International Standards Organization.
IUPAC	International Union of Pure and Applied Chemistry
LC50	Lethal Concentration 50%.
LCLo	Lowest published lethal concentration.
LD50	Lethal Dose 50%.
LOAEL	Lowest Observed Adverse Effect Level
LOEC	Lowest observable effect concentration.
LOEL	Lowest observable effect level.
LQ	Limited quantities
TRK-Kzw	Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value, Austria.
MAK-Mow	Maximum allowable workplace concentration – instantaneous value, Austria.
MAK-Tmw, TRK-Tmw	Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value, Austria.
MAK	Threshold limit values Germany.
MARPOL	International Convention for the Prevention of Pollution from Ships.
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
NOEL	no-observed-effect level
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limits
PBT	Persistent Bioaccumulative Toxic
PC (Chemical product category)	PC (Chemical product category)
PNEC	Predicted No-Effect Concentration
POCP	Photochemical ozone creation potential.
POP	Persistent Organic Pollutants
PPE	Personal protective equipment
Process category	Process category
REACH	Registration, Evaluation and Authorization of Chemicals (REGULATION (EC) No 1907/2006 concerning Registration, Evaluation Authorization and Restriction of Chemicals).
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SCL	Specific concentration limit.
STEL	Short-term Exposure Limit
STP	Sewage treatment plant
SU (Sector of use)	SU (Sector of use)
SVHC	Substance of Very High Concern.
TLV	Threshold Limit Value
TRGS	Technical Rules for Hazardous Substances (German Standard).
TWA	Time Weighted Average
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological materials
VbF	Ordinance on Flammable Liquids, Austria
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative

WEL-TWA Workplace Exposure Limit-Long term exposure limit (8-hour TWA(=time weighted average)reference period).

WEL-STEL Workplace Exposure Limit-Short term exposure limit (15-minute reference period).

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

Classification according to Regulation (EC) No. 1272/2008

Acute Tox. 4 (Oral)	H302
Skin Corr. 1B	H314
Eye Dam. 1	H318
Skin Sens. 1	H317
STOT SE 3	H335
STOT RE 2	H373
Aquatic Chronic 2	H411

Full text of H- and EUH-statements

Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3.
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4.
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4.
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1.
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1.
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2.
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1.
Flam. Liq. 3	Flammable liquids, Category 3.
Skin Corr. 1B	Skin corrosion/irritation, Category 1B.
Skin Corr. 1C	Skin corrosion/irritation, Category 1C.
Skin Irrit. 2	Skin corrosion/irritation, Category 2.
Skin Sens. 1	Skin sensitisation, Category 1.
Skin Sens. 1B	Skin sensitisation, category 1B.
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2.
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation.
H226	Flammable liquid and vapour..
H301	Toxic if swallowed..
H302	Harmful if swallowed..
H312	Harmful in contact with skin..
H314	Causes severe skin burns and eye damage..
H315	Causes skin irritation..
H317	May cause an allergic skin reaction..
H318	Causes serious eye damage..
H335	May cause respiratory irritation..
H373	May cause damage to organs through prolonged or repeated exposure..
H400	Very toxic to aquatic life..

H410	Very toxic to aquatic life with long lasting effects..
H411	Toxic to aquatic life with long lasting effects..
H412	Harmful to aquatic life with long lasting effects..

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]

Acute Tox. 4 (Oral)	H302	Calculation method
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Expert judgment
Skin Sens. 1	H317	Calculation method
STOT SE 3	H335	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 2	H411	Calculation method

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: Metal Adhesive H Component B

Ford Int. Ref. No.: 193356

REVISION DATE: 16.03.2020

Involved Products:

Finiscode	Part number	Container Size:
1	FU7J M2G400 BA	65 ml
Part of Kit: 1 947 915	FU7J M11P47 AA	Metal Adhesive Kit H – 2 Component