



SAFETY DATA SHEET

according to regulation (EU) No 453/2010

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

1.1. Product identifier

Trade name or designation of the mixture Metal Adhesive H Component B
Registration number -
Synonyms None.
SDS number 5654
Product code Ford Internal Ref.: 193356
Issue date 15-July-2015
Version number 1.0
Revision date 15-July-2015
Product use Professional use

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

Identified uses Adhesive.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company name Ford Motor Company Ltd.
Address Parts Distribution Centre
Royal Oak Way South
NN11 8NT Daventry, Northants
United Kingdom
Telephone number +44 1327 305 198
Address Ford-Werke GmbH
Edsel-Ford-Str. 2-14
50769 Köln
Germany
Telephone number +49 221 90-33333
E-mail HSE@rle.de
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

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Acute toxicity, oral	Category 4	H302 - Harmful if swallowed.
Skin corrosion/irritation	Category 1A	H314 - Causes severe skin burns and 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 through prolonged or repeated exposure.

Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
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2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 3-Aminopropyldimethylamine, 4,4'-Methylenebis(cyclohexylamine), Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia, Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups, Triethylenetetramine

Hazard pictograms

Signal word Danger

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 through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

Precautionary statements**Prevention**

P260 Do not breathe dust/fume/gas/mist/vapors/spray.
 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/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/doctor.

Storage None.

Disposal None.

Supplemental label information None.

2.3. Other hazards The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
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Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia	25 - 40	960525-56-8	-	-	
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Classification: Acute Tox. 4;H302, Skin Corr. 1C;H314, STOT SE 3;H335, Aquatic Chronic 3;H412

4,4'-Methylenebis(cyclohexylamine)	10 - < 20	1761-71-3 217-168-8	-	-	
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Classification: Acute Tox. 4;H302, Skin Corr. 1A;H314, Skin Sens. 1;H317, STOT RE 2;H373, Aquatic Chronic 2;H411

Fatty acids, C18-unsaturated dimers, reaction products with polyethylenepolyamines	10 - < 20	68410-23-1	-	-	
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Classification: Eye Dam. 1;H318, Aquatic Acute 1;H400, Aquatic Chronic 1;H410

Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups	10 - < 20	9046-10-0	01-2119557899-12-XXXX	-	
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Classification: Skin Corr. 1C;H314, Aquatic Chronic 2;H411

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
1,3-Bis[3-(dimethylamino)propyl]urea	1 - < 5	52338-87-1 257-861-2	-	-	
Classification:	Skin Irrit. 2;H315, Eye Irrit. 2;H319				
3-Aminopropyldimethylamine	1 - < 5	109-55-7 203-680-9	01-2119486842-27-XXXX	612-061-00-6	
Classification:	Flam. Liq. 3;H226, Acute Tox. 4;H302, Skin Corr. 1B;H314, Skin Sens. 1;H317				
Triethylenetetramine	1 - < 3	112-24-3 203-950-6	-	612-059-00-5	
Classification:	Acute Tox. 4;H312, Skin Corr. 1B;H314, Skin Sens. 1;H317, Aquatic Chronic 3;H412				

Composition comments The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

4.1. Description of first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor/physician if you feel unwell.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. Call a physician or poison control centre immediately. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

Ingestion Call a physician or poison control centre immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

4.2. Most important symptoms and effects, both acute and delayed Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Prolonged exposure may cause chronic effects.

4.3. Indication of any immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. Chemical burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures

General fire hazards No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

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 During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures Move containers from fire area if you can do so without risk.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8.

For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
6.2. Environmental precautions	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.
6.3. Methods and material for containment and cleaning up	<p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills to original containers for re-use.</p>
6.4. Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Do not taste or swallow. When using, do not eat, drink or smoke. Provide adequate ventilation. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Storage temperature: between 5°C and 35°C.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.

Derived no-effect level (DNEL)

Components	Type	Route	Value	Form
3-Aminopropyldimethylamine (CAS 109-55-7)	Professional	Inhalation	9.8 mg/m ³	
Comments:	Short term exposure - systemic effects			
		Inhalation	4.9 mg/m ³	
Comments:	Long term exposure systemic effects			
Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups (CAS 9046-10-0)	Consumer	Dermal	0.311 mg/cm ²	
Comments:	Long term exposure - local effects			
		Dermal	1.25 mg/kg/BW/day	
Comments:	Long term exposure systemic effects			
		Oral	0.04 mg/kg/BW/day	
Comments:	Long term exposure systemic effects			
	Professional	Dermal	0.623 mg/cm ²	
Comments:	Long term exposure - local effects			
		Dermal	2.5 mg/kg/BW/day	
Comments:	Long term exposure systemic effects			

Predicted no effect concentrations (PNECs)

Components	Type	Route	Value	Form
3-Aminopropyldimethylamine (CAS 109-55-7)	Not applicable	Freshwater	0.034 mg/l	
		Seawater	0.0034 mg/l	
		Sediment	0.221 mg/kg	
Comments:	Freshwater			
		Sediment	0.0221 mg/kg	
Comments:	Seawater			

Components	Type	Route	Value	Form
		Soil	0.0242 mg/kg	
		STP	69.5 mg/l	
		Water	0.34 mg/l	
Comments:	Intermittent release			
Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups (CAS 9046-10-0)	Not applicable	Freshwater	0.015 mg/l	
Comments:	food, predators	Oral	6.93 mg/kg	
		Seawater	0.0142 mg/l	
		Sediment	0.132 mg/kg	
Comments:	Freshwater			
		Sediment	0.125 mg/kg	
Comments:	Seawater			
		Soil	0.0176 mg/kg	
		STP	7.5 mg/l	
		Water	0.15 mg/l	
Comments:	Intermittent release			

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. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment

General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection

- Hand protection

Nitrile.

Glove thickness 0.4 mm.
Break through time > = 480 min.

Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

Hand protection in case of splash contact
Nitrile.

Glove thickness 0.4 mm.
Break through time > = 480 min

Glove recommendation: Camatril Velours® 730 (Kächele-Cama GmbH, source of supply see www.kcl.de) or comparable product.

The protective gloves to be used must comply with the specification of EU directive 89/686/EC and the resultant standard EN374. The above given information is based on laboratory test in line with EN374. 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.

- Other

Wear appropriate chemical resistant clothing.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

Hygiene measures

Keep away from food and drink. 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. Contaminated work clothing should not be allowed out of the workplace.

Environmental exposure controls

Inform appropriate managerial or supervisory personnel of all environmental releases.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Paste.
Form	Paste.
Colour	Grey.
Odour	Characteristic
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Solubility (other)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	1 - 3 mPa·s
Explosive properties	Not available.
Oxidising properties	Not available.

9.2. Other information

Density	0.90 - 1.10 g/cm ³ @ 20°C
VOC (EU)	0 %
VOC (CH)	< 3 %

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Peroxides. Phenols.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information Occupational exposure to the substance or mixture may cause adverse effects.

Information on likely routes of exposure

Inhalation	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes severe skin burns. May cause an allergic skin reaction.
Eye contact	Causes serious eye damage.
Ingestion	Causes digestive tract burns. Harmful if swallowed.

Symptoms Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation.

11.1. Information on toxicological effects

Product	Species	Test results
Metal Adhesive H Component B		
<u>Acute</u> Dermal		> 2000 mg/kg (calcd. ATE)
Oral		700 - 1500 mg/kg (calcd. ATE)
Components	Species	Test results
3-Aminopropyldimethylamine (CAS 109-55-7)		
<u>Acute</u> Oral		500 mg/kg (acc. CLP 3.1.2)
4,4'-Methylenebis(cyclohexylamine) (CAS 1761-71-3)		
<u>Acute</u> Oral		
LD50	Rat	380 mg/kg
Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia (CAS 960525-56-8)		
<u>Acute</u> Oral		500 mg/kg (acc. CLP 3.1.2)
Triethylenetetramine (CAS 112-24-3)		
<u>Acute</u> Dermal		300 mg/kg (acc. CLP 3.1.2)

Skin corrosion/irritation	Causes skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitisation	Based on available data, the classification criteria are not met.
Skin sensitisation	May cause an allergic skin 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.
Specific target organ toxicity - single exposure	May cause respiratory irritation.
Specific target organ toxicity - repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not likely, due to the form of the product.
Mixture versus substance information	No information available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity Toxic to aquatic life with long lasting effects.

Components	Species	Test results
4,4'-Methylenebis(cyclohexylamine) (CAS 1761-71-3)		
<u>Aquatic</u>		
Crustacea	EC50	Daphnia magna 6.84 mg/l, 48 h
Fish	LC50	Leuciscus idus 46 - 100 mg/l, 96 h
Fatty acids, C18-unsaturated dimers, reaction products with polyethylenepolyamines (CAS 68410-23-1)		
<u>Aquatic</u>		
Algae	EC50	Desmodesmus subspicatus(reported as Scenedesmus subspicatus) 0.9 mg/l, 72 h
	NOEC	Desmodesmus subspicatus(reported as Scenedesmus subspicatus) 0.4 mg/l, 72 h

Components		Species	Test results
Crustacea	EC50	Daphnia magna	0.46 mg/l, 48 h
Fish	LC50	Oncorhynchus mykiss	2.4 mg/l, 96 h
Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups (CAS 9046-10-0)			
Other	EC50	Pseudokirchnerella subcapitata	15 mg/l, 72 h
	NOEC	Pseudokirchnerella subcapitata	0.32 mg/l, 72 h
Aquatic			
Crustacea	EC50	Daphnia magna	80 mg/l, 48 h
Fish	LC50	Leuciscus idus	> 220 mg/l, 96 h

12.2. Persistence and degradability No data is available on the degradability of this product.

Biodegradability

Percent degradation (Aerobic biodegradation)

3-Aminopropyldimethylamine	65 % (OECD 301 D)
Fatty acids, C18-unsaturated dimers, reaction products with polyethylenepolyamines	< 60 % (OECD 301 B)
Reaction products of propane-1,2-diol, propoxylated by amination of the terminal hydroxyl groups	0 % (OECD 301 B)
Triethylenetetramine	0 % (OECD 301 D)

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol /water (log Kow)

3-Aminopropyldimethylamine	-0.352
Fatty acids, C18-unsaturated dimers, reaction products with polyethylenepolyamines	8.71
Triethylenetetramine	-2.65

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment The mixture contains no substance that fulfils the criteria of a PBT- or vPvB substance.

12.6. 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 component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. 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).
Contaminated packaging	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.
EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company. 08 04 09 15 01 10
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

General	IMDG Regulated Marine Pollutant.
ADR	
14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia; 4,4'-Methylenebis(cyclohexylamine))
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
Label(s)	8

Hazard No. (ADR)	80
Tunnel restriction code	E
14.4. Packing group	II
14.5. Environmental hazards	Yes
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	274
Classification code	C7

IATA

14.1. UN number	UN2735
14.2. UN proper shipping name	Amines, liquid, corrosive, n.o.s. (Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia; 4,4'-Methylenebis(cyclohexylamine))
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
Packaging instructions	851
Packaging instructions cargo only	855
14.5. Environmental hazards	Yes
ERG Code	8L
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed.
Cargo aircraft only	Allowed.
Maximum net quantity packaging - Passenger and cargo aircraft	1 L
Maximum net quantity packaging cargo only	30 L
Maximum net quantity packaging - Limited quantity	0.50 L
Special provisions	A3,A803

IMDG

14.1. UN number	UN2735
14.2. UN proper shipping name	AMINES, LIQUID, CORROSIVE, N.O.S. or POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Poly(oxy-1,4-butanediyl), alpha-hydro-omega-hydroxy-, polymer with ammonia; 4,4'-Methylenebis(cyclohexylamine))
14.3. Transport hazard class(es)	
Class	8
Subsidiary risk	-
14.4. Packing group	II
14.5. Environmental hazards	
Marine pollutant	Yes
EmS	F-A, S-B
14.6. Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	274
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

SECTION 15: Regulatory information

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

EU regulations

Not applicable.

Restrictions on use

Not applicable.

Other regulations

This Safety Data Sheet complies with the requirements of Regulation (EC) No 453/2010.

Other EU regulations

Directive 94/33/EC on the protection of young people at work, as amended

3-Aminopropyldimethylamine (CAS 109-55-7)

Triethylenetetramine (CAS 112-24-3)

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

3-Aminopropyldimethylamine (CAS 109-55-7)

Triethylenetetramine (CAS 112-24-3)

VOC (EU): 0 %

Directive 2012/18/EU on major accident hazards involving dangerous substances

Category: E2

National regulations

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

AC: Article category.

acc., acc.to: according, according to.

ACGIH: American Conference of Governmental Industrial Hygienists.

AFNOR: French Institute for Standards (Association Française de Normalisation).

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures).

ADR: European agreement concerning the international carriage of dangerous goods by road (Accord européen relatif transport des marchandises dangereuses par route).

AGW: Occupational threshold limit value (Arbeitsplatzgrenzwert – Germany).

AICS: Australian Inventory of Chemical Substances.

ANSI: American National Standards Institute.

AOEL: Acceptable Operator Exposure Level.

AOX: adsorbable organic halogen compounds.

approx.: approximately.

ASTM: ASTM International.

ATE: Acute Toxicity Estimate according to REGULATION (EC) No 1272/2008 (CLP).

BAM: Federal Institute for Materials Research and Testing, Germany (Bundesanstalt für Materialforschung und -prüfung).

Maximum permissible concentration of biological working substances (BAT: Biologische Arbeitsstofftoleranzwerte).

BAuA: Federal Institute for Occupational Health and Safety, Germany (Bundesanstalt für Arbeitsschutz und Arbeitsmedizin).

BCF: Bio-concentration factor.

BET: Brunauer-Emmett-Teller.

BLV: Biological Limit Value.

BLV: Biological Limit Value (BGW: Biologischer Grenzwert, Austria).

BMGV: Biological Monitoring Guidance Value (EH40,UK).

BSI: British Standards Institution.

BS: British Standard.

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 (Comité Européen de Normalisation).

CESIO: European Committee on Organic Surfactants and their Intermediates (Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques).

ChemRRV: Ordinance on the risk reduction related to chemical products (ChemRRV:

Chemikalien-Risikoreduktions-verordnung, Switzerland).

CLP: Classification, Labeling and Packaging REGULATION (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures.

CMR: Substances classified as Carcinogenic, Mutagenic or toxic for Reproduction.

CNS: Central Nervous System.

CNT: Carbon nanotubes.

COD: Chemical Oxygen Demand.

CSA: Chemical Safety Assessment.

CSR: Chemical Safety Report.

DETEC: Swiss Federal Department of the Environment, Transport, Energy and Communications.
DIN: German Standards Institute / German industrial norm (Deutsches Institut für Normung / Deutsche Industrienorm).
DMEL: Derived Minimum Effect Level.
DNEL: Derived No Effect Level.
DOC: Dissolved organic carbon.
DPD: Directive 1999-45-EC / Dangerous Preparations Directive.
DSD: Directive 67/548-EC / Dangerous Substances Directive.
DSL: Canada, Domestic Substances List.
DU: Downstream User.
dw: dry weight.
e.g.: For example, for instance.
EBW: Exposure Based Waiving.
EC: European Community.
EC50: Effective Concentration 50%.
ECHA: European Chemical Agency.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European norm.
ENCS: Japan, Inventory of Existing and New Chemical Substances.
EPA: United States Environmental Protection Agency.
ERC: Environmental release category.
ES: Exposure scenario.
EUSES: European Union System for the Evaluation of Substances.
EWC/EWL: European Waste Catalogue.
GCL: General concentration limit.
gen.: general.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
GLP: Good Laboratory Practice.
GW/VL: Occupational exposure limit value.
GW-kw: Occupational exposure limit value - short term.
GW-M/VL-M: Occupational exposure limit value – "Ceiling".
GWP: Global Warming Potential.
HPV: High Production Volume Chemicals.
HEPA: High Efficiency Particulate Air.
IARC: International Agency for Research on Cancer.
IATA: International Air Transport Association.
IBC: Intermediate Bulk Container.
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 Code: International Maritime Dangerous Goods Code.
IMO: International Maritime Organization.
incl.: including, inclusive.
ISO: International Standards Organization.
IUCLID: International Uniform Chemical Information Database.
IUPAC: International Union for Pure Applied Chemistry.
KECI: Korea Existing Chemicals Inventory.
LCA: Life Cycle Assessment.
LC: Lethal Concentration.
LC50: Lethal Concentration 50%.
LCLo: Lowest published lethal concentration.
LD50: Lethal Dose 50%.
LEV: Local exhaust ventilation.
LOAEL: Lowest observed adverse effect level.
LOEC: Lowest observable effect concentration.
LOEL: Lowest observable effect level.
LPV: Low Production Volume Chemicals.
LQ: Limited Quantities.
Air Quality Control Regulation (LRV: Luftreinhalteverordnung, Switzerland).
TLV-STEL: Threshold limit value - Short-term exposure limit / Technical reference concentration - short-time value (TRK-Kzw = Technische Richtkonzentration - Kurzzeitwert).
Maximum allowable workplace concentration – instantaneous value (MAK-Mow: Maximale Arbeitsplatzkonzentration – Momentanwert, Austria)

Maximum allowable workplace concentration – daily mean value / Technical standard concentration – daily mean value (MAK-Tmw, TRK-Tmw : Maximale Arbeitsplatzkonzentration - Tagesmittelwert / TRK-Tmw = Technische Richtkonzentration – Tagesmittelwert, Austria).
MAK: Threshold limit values Germany (Maximale Arbeitsplatzkonzentration - DFG).
MARPOL: International Convention for the Prevention of Pollution From Ships.
MTD: Maximum tolerated dose.
MWCNT: Multi-walled carbon nanotubes.
n.a.: not applicable.
N/A: Not available.
n.d.: not determined.
NLP: No Longer Polymers.
NDSL: Canada, Non-Domestic Substances List.
NF: French Norm (See AFNOR).
NFPA: National Fire Protection Association.
NIOSH: National Institute for Occupational Safety & Health.
NOAEC: No Observed Adverse Effect Concentration.
NOAEL: No observed adverse effect level.
NOEC: No observed effect concentration.
NOEL: No observed effect level.
NTP: National Toxicology Program.
NZIoC: New Zealand Inventory of Chemicals.
ODP: Ozone Depletion Potential.
OECD: Organization for Economic Cooperation and Development.
OEL: Occupational Exposure Limit.
org.: organic.
OSHA: Occupational Safety & Health Administration.
PAH: Polycyclic Aromatic Hydrocarbons.
PBT: Persistent, bioaccumulative, toxic.
PC: Product category.
PE: Polyethylene.
PEC: Predicted Environmental Concentration.
PEL: Permissible Exposure Limit.
PIC: Prior Informed Consent.
PICCS: Philippines Inventory of Commercial Chemical Substances.
PNEC: Predicted No Effect Concentration.
POCP: Photochemical ozone creation potential (Photochemisches Ozonbildungspotenzial).
POP: Persistent Organic Pollutant.
PPORD: Product and Process Oriented Research and Development.
PPE: Personal Protective Equipment.
PROC: Process category.
RA: Risk Assessment.
RAR: Risk Assessment Report.
RCRA: Resource Conservation Recovery Act.
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 (Règlement International concernant le transport de marchandises dangereuses par chemin de fer).
RMM: Risk Management Measure.
RTECS: Registry of Toxic Effects of Chemical Substances.
QSAR: Quantitative Structure Activity Relation.
SARA: Superfund Amendments and Reauthorization Act.
SADT: Self-Accelerating Decomposition Temperature.
SCL: Specific concentration limit.
SEA: socio economic analysis.
STEL: Short-term Exposure Limit.
STP: Sewage treatment plant.
SU: Sector of use.
SVHC: Substance of Very High Concern.
SWCNT: single-walled carbon nanotubes.
ThOD: Theoretical oxygen demand.
TOC: Total Organic Carbon.
TLV: Threshold Limit Value.
TRA: Targeted Risk Assessment.
TSCA: Toxic Substance Control Act.
TWA: Time Weighted Average.
UC: Use category.
UDS: Use descriptor system.
UEC: Use and exposure categories.

UN: United Nations.
UN RTDG: United Nations Recommendations on the Transport of Dangerous Goods.
UVCB: Unknown or Variable Composition, Complex Reaction Products, and Biological Materials.
Regulation on combustible liquids (VbF: Verordnung über brennbare Flüssigkeiten, Austria).
Regulation of the Austria Minister for Labor and Social Affairs regarding health surveillance at the workplace (VGÜ = Verordnung des Bundesministers für Arbeit und Soziales über die Gesundheitsüberwachung am Arbeitsplatz).
VOC: Volatile organic compounds.
vPvB: very Persistent, 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).
WoE: Weight of evidence.
WHMIS: Workplace Hazardous Materials Information System.
WHO: World Health Organization.
wwt: wet weight.

References

Information on evaluation method leading to the classification of mixture

Not available.
The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H226 Flammable liquid and vapour.
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.
H319 Causes serious eye irritation.
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.

Revision information

None.

Training information

Follow training instructions when handling this material.

Disclaimer

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

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Print Date: 15.07.2015

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 Components