SAFETY DATA SHEET D409 Contact Adhesive

According to Regulation (EC) No 1907/2006, Annex II

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

1.1. Product identifier

Product name D409 Contact Adhesive

Container size 500ml

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

Identified uses Contact Adhesive

Uses advised againstNo specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier www.delta-adhesives.co.uk

Delta Adhesives Ltd

Units 39-41 Claycliffe Business Park

Cannon Way, Barugh Green Barnsley, South Yorkshire

S75 1JU

Tel: 01226 381 571 Fax: 01226 381722

1.4. Emergency telephone number

Emergency telephone Delta Adhesives Ltd +44 (0) 1226 381 571 (Mon-Fri 09:00 - 17:00)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 2 - H225

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram







Signal word

Danger

Hazard statements H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH208 Contains ROSIN. May produce an allergic reaction.

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Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents/ container in accordance with national regulations.

P260 Do not breathe vapours.
P313 Get medical advice/ attention.

Contains Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane, ACETONE, ETHYL

ACETATE

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. In use may form flammable/explosive vapour-air mixture.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-

30-60%

hexane

CAS number: — EC number: 921-024-6 REACH registration number: 01-

2119475514-35-XXXX

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 STOT SE 3 - H336 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

ETHYL ACETATE 10-30%

CAS number: 141-78-6 EC number: 205-500-4 REACH registration number: 01-

2119475103-46

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

ACETONE 10-30%

CAS number: 67-64-1 EC number: 200-662-2 REACH registration number: 01-

2119471330-49-XXXX

Classification

Flam. Liq. 2 - H225 Eye Irrit. 2 - H319 STOT SE 3 - H336

XYLENE 5-10%

CAS number: 1330-20-7 EC number: 215-535-7 REACH registration number: 01-

2119488216-32-0000

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Irrit. 2 - H315

ZINC OXIDE <1%

Classification

Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

HEXANE-norm <1%

CAS number: 110-54-3 EC number: 203-777-6 REACH registration number: 01-

2119474209-33-XXXX

Classification

Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Repr. 2 - H361f STOT SE 3 - H336 STOT RE 2 - H373 Asp. Tox. 1 - H304 Aquatic Chronic 2 - H411

ROSIN <1%

CAS number: 8050-09-7 EC number: 232-475-7 REACH registration number: 01-

2119480418-32-0036

Classification

Skin Sens. 1 - H317

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Move affected person to fresh air and keep warm and at rest in a position comfortable for

breathing. Get medical attention if any discomfort continues.

Inhalation Remove affected person from source of contamination. Move affected person to fresh air and

keep warm and at rest in a position comfortable for breathing.

Ingestion Rinse mouth thoroughly with water. Get medical attention.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water.

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Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide

apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Show this

Safety Data Sheet to the medical personnel.

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

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

length of exposure. Prolonged and repeated contact with solvents over a long period may lead

to permanent health problems.

Inhalation Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion May cause discomfort if swallowed. May cause stomach pain or vomiting.

Skin contact Skin irritation. Prolonged skin contact may cause redness and irritation.

Eve contact May cause temporary eye irritation.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant

foam, carbon dioxide or dry powder.

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

Specific hazards The product is flammable. Protection against nuisance dust must be used when the airborne

concentration exceeds 10 mg/m3. The product is highly flammable. Heating may generate

flammable vapours.

Hazardous combustion

products

Does not decompose when used and stored as recommended.

5.3. Advice for firefighters

Protective actions during

firefighting

Control run-off water by containing and keeping it out of sewers and watercourses. Avoid breathing fire gases or vapours. Keep upwind to avoid inhalation of gases, vapours, fumes

and smoke.

Special protective equipment

for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8.

6.2. Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. Spillages or uncontrolled

discharges into watercourses must be reported immediately to the Environmental Agency or

other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Absorb in vermiculite, dry sand or earth and place into containers. Provide adequate

ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Eliminate all

sources of ignition.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet. For waste

disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Keep away from heat, sparks and open flame. Static electricity

and formation of sparks must be prevented.

Advice on general occupational hygiene

Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep away from heat, sparks and open flame. Keep container tightly closed. Keep only in the

original container.

Storage class Flammable liquid storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 200 ppm Short-term exposure limit (15-minute): WEL 400 ppm

ACETONE

Long-term exposure limit (8-hour TWA): WEL 500 ppm 1210 mg/m³ Short-term exposure limit (15-minute): WEL 1500 ppm 3620 mg/m³

XYLENE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 220 mg/m3(Sk) Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 441 mg/m3(Sk)

HEXANE-norm

Long-term exposure limit (8-hour TWA): WEL 20 ppm 72 mg/m³

Short-term exposure limit (15-minute): WEL

WEL = Workplace Exposure Limit

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

DNEL Consumer - Oral; Long term systemic effects: 699 mg/kg/day

Workers - Oral; Long term systemic effects: 2035 mg/kg/day Consumer - Dermal; Long term systemic effects: 699 mg/kg/day Workers - Dermal; Long term systemic effects: 773 mg/kg/day Consumer - Inhalation; Long term systemic effects: 608 mg/m³

ACETONE (CAS: 67-64-1)

DNEL Consumer - Oral; Long term : 62 mg/kg/day

Consumer - Dermal; Long term : 62 mg/kg/day Industry - Dermal; Long term : 186 mg/kg/day Consumer - Inhalation; Long term : 200 mg/m³ Industry - Inhalation; Short term : 2420 mg/m³ Industry - Inhalation; Long term : 1210

PNEC - Fresh water; 10.6 mg/l

Marine water; 1.06 mg/lIntermittent release; 21 mg/l

- Soil; 29.5 mg/l

Sediment (Marinewater); 3.04 mg/kgSediment (Freshwater); 30.4 mg/kg

ETHYL ACETATE (CAS: 141-78-6)

PNEC - Fresh water; 0.26 mg/l

Marine water; 0.026 mg/l
Intermittent release; 1.65 mg/l
Sediment (Freshwater); 1.25 mg/kg
Sediment (Marinewater); 0.125 mg/kg

- Soil; 0.24 mg/kg - STP; 650 mg/l

8.2. Exposure controls

Protective equipment









exposure limits for the product or ingredients.



Appropriate engineering controls

Personal protection Wear protective work clothing.

Eye/face protection

The following protection should be worn: Chemical splash goggles. Provide eyewash station.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. (Sk) noted above means can be absorbed through skin.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Wear apron or protective clothing in case of contact.

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational

Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash contaminated clothing before reuse. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Respiratory protection

In confined or poorly-ventilated spaces, a supplied-air respirator must be worn. Wear a respirator fitted with the following cartridge: Gas filter, type AX.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Coloured liquid.

Colour Various colours.

Odour Characteristic.

Odour threshold Not available.

pH Not available.

Melting point Not available.

Initial boiling point and range Not determined.

Flash point Technically not feasible.

Evaporation rate Not determined.

Evaporation factor Not available.

Flammability (solid, gas) Not available.

Upper/lower flammability or

explosive limits

Not available.

Other flammability Not available.

Vapour pressure Not available.

Vapour density Not available.

Relative density 0.86 @ 20°C

Bulk density Not available.

Solubility(ies) Insoluble in water.

Partition coefficient Not available.

Auto-ignition temperature Not available.

Decomposition Temperature Not available.

Viscosity 4200 cP @ 20°C

Explosive properties Not available.

Explosive under the influence

of a flame

Not considered to be explosive.

Oxidising properties Not available.

Comments Information given is applicable to the product as supplied.

9.2. Other information

Volatile organic compound This product contains a maximum VOC content of 654 g/litre.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Stable under recommended transport or storage conditions.

10.2. Chemical stability

D409 Contact Adhesive

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No known hazardous reactions if stored under normal conditions. Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Strong acids. Strong alkalis.

10.6. Hazardous decomposition products

Hazardous decomposition

products

Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Oxides of

nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

ATE dermal (mg/kg) 22,000.0

Acute toxicity - inhalation

ATE inhalation (vapours mg/l) 520.0

Aspiration hazard

Aspiration hazard Kinematic viscosity > 20.5 mm²/s.

General information Prolonged and repeated contact with solvents over a long period may lead to permanent

health problems.

Inhalation May cause respiratory system irritation.

Ingestion May cause stomach pain or vomiting.

Skin contact Irritating to skin.

Eye contact May cause severe eye irritation.

Acute and chronic health

hazards

Vapour from this product may be hazardous by inhalation.

Route of entry Inhalation Skin absorption Ingestion Skin and/or eye contact

Target organs Brain Central nervous system Eyes Respiratory system, lungs

Medical symptoms Gas or vapour in high concentrations may irritate the respiratory system. Symptoms following

overexposure may include the following: Headache. Fatigue. Nausea, vomiting.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Skin corrosion/irritation

Skin corrosion/irritation Skin irritation.

Serious eye damage/irritation

Serious eye Based on available data the classification criteria are not met.

damage/irritation

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Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitroBased on available data the classification criteria are not met.

Genotoxicity - in vivoBased on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure May cause drowsiness or dizziness.

30.0

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

ETHYL ACETATE

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0

mg/kg)

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation

(LC₅₀ vapours mg/l)

ACETONE

Toxicological effects The toxicity of this substance has been assessed during REACH registration.

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ 2,000.0

mg/kg)

Species Rabbit

Skin sensitisation

Skin sensitisation Epidemiological studies have shown no evidence of skin sensitisation.

Skin contact Irritating to skin.

Eye contact Irritating to eyes.

XYLENE

Acute toxicity - dermal

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Acute toxicity dermal (LD₅₀ 4,350.0

mg/kg)

Species Rabbit

Acute toxicity - inhalation

Acute toxicity inhalation 26.0

(LC₅₀ vapours mg/l)

Species Rat

ATE inhalation (vapours

mg/l)

26.0

SECTION 12: Ecological Information

Ecotoxicity The product contains substances which are toxic to aquatic organisms and which may cause

long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Acute toxicity - fish LC₅₀, : 1-10 mg/l, Algae

NOEC, : 1-10 mg/l, Algae

Acute toxicity -LC₅₀, : 1-10 mg/l, Activated sludge microorganisms NOEC, : 0.1-1 mg/l, Activated sludge

ETHYL ACETATE

NOEC, 192 hours: > 9.65 mg/l, Pimephales promelas (Fat-head Minnow) Acute toxicity - fish

, 96 hours: 230 mg/l, Pimephales promelas (Fat-head Minnow)

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 610 mg/l, Daphnia magna NOEC, 192 hours: 2.4 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC₅₀, 48 hours: 5600 mg/l, Freshwater algae

ACETONE

Acute toxicity - fish LC₅₀, 96 hours: >100 mg/l, Fish

Acute toxicity - aquatic

invertebrates

EC₅₀, 48 hours: 12600 mg/l, Daphnia magna EC₅₀, 48 hours: 8300 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

IC₅₀, 72 hours: >100 mg/l, Algae

Chronic toxicity - aquatic

invertebrates

NOEC, 28 days: >10<100 mg/l, Freshwater invertebrates

ZINC OXIDE

Acute aquatic toxicity

LE(C)50 $0.1 < L(E)C50 \le 1$

D409 Contact Adhesive

M factor (Acute) 1

Chronic aquatic toxicity

M factor (Chronic) 1

12.2. Persistence and degradability

Persistence and degradability No data available.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Persistence and degradability

No data available.

ETHYL ACETATE

Persistence and degradability

The product is readily biodegradable.

ACETONE

Persistence and degradability

The product is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient Not available.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Bioaccumulative potential Not available.

ETHYL ACETATE

Bioaccumulative potential The product does not contain any substances expected to be bioaccumulating.

BCF: 30, Leuciscus idus (Golden orfe)

12.4. Mobility in soil

Mobility The product contains volatile organic compounds (VOCs) which will evaporate easily from all

surfaces.

ETHYL ACETATE

Mobility The product contains volatile organic compounds (VOCs) which will evaporate

easily from all surfaces.

Adsorption/desorption

coefficient

Water - Koc: 1.43 @ 25°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB

This product does not contain any substances classified as PBT or vPvB.

assessment

ETHYL ACETATE

Results of PBT and vPvB assessment

This product does not contain any substances classified as PBT or vPvB.

ACETONE

Results of PBT and vPvB This product does not contain any substances classified as PBT or vPvB. assessment

12.6. Other adverse effects

Other adverse effects Not known.

Ozone depletion potential

Global warming potential

(GWP)

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Other adverse effects The product contains a substance which is toxic to aquatic organisms and which

may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the

local Waste Disposal Authority.

Disposal methods Arrange disposal with a licensed waste disposal company.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 1133

UN No. (IMDG) 1133

UN No. (ICAO) 1133

UN No. (ADN) 1133

14.2. UN proper shipping name

Proper shipping name ADHESIVES

(ADR/RID)

Proper shipping name (IMDG) ADHESIVES

Proper shipping name (ICAO) ADHESIVES

Proper shipping name (ADN) ADHESIVES

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID classification code F1

ADR/RID label 3

IMDG class 3

ICAO class/division 3

ADN class 3

Transport labels



14.4. Packing group

ADR/RID packing group III
IMDG packing group III
ADN packing group III
ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-E, S-D

ADR transport category 3

Emergency Action Code •3Y

Hazard Identification Number

(ADR/RID)

Tunnel restriction code (D/E)

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

30

SECTION 15: Regulatory information

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

National regulations The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as

amended).

Health and Safety at Work etc. Act 1974 (as amended).

EU legislation 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 (as

amended).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of

Chemicals (REACH) (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Issued by Technical Department

Revision date 10/11/2016

Revision 6

Supersedes date 05/07/2016

SDS number 21017

Hazard statements in full H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

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.

EUH208 Contains ROSIN. May produce an allergic reaction.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.