

SAFETY DATA SHEET POWERFIX ADHESIVE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name POWERFIX ADHESIVE
Product No. POWERFIX Part AD

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

Identified uses Adhesive.

1.3. Details of the supplier of the safety data sheet

Supplier Tough Technology Products Limited.
114 Washway Road, Sale, Cheshire, M33 7RF

Tel: 0044 800 772 0996

Emergency (mon-fri: 08.30 - 17.00) Tel: 0044 800 772 0996

E-mail: sales@ttproducts.com

1.4. Emergency telephone number

(mon-fri: 08.30 - 17.00) Tel: 0044 800 772 0996

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Flam. Liq. 2 - H225
Human health	Skin Corr. 1B - H314; Skin Sens. 1 - H317; STOT SE 3 - H335
Environment	Aquatic Chronic 3 - H412

Classification (1999/45/EEC) C;R34. Xi;R37. R43. F;R11. R52/53.

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

Human health

In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Vapours/aerosol spray may irritate the respiratory system. Risk of sensitisation or allergic reactions among sensitive individuals.

Environment

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

Physical and Chemical Hazards

The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

2.2. Label elements

Contains METHACRYLIC ACID
METHYL METHACRYLATE

Label In Accordance With (EC) No. 1272/2008

Signal Word



Danger

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Hazard Statements

H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+351+338	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 or doctor/physician.

Supplementary Precautionary Statements

P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P260	Do not breathe vapour/spray.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P370+378	In case of fire: Use foam, carbon dioxide, dry powder or water fog for extinction.
P301+330+331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+352	IF ON SKIN: Wash with plenty of soap and water.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to ...

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BUTYLATED HYDROXY TOLUENE	<1%
CAS-No.: 128-37-0	EC No.: 204-881-4
Classification (EC 1272/2008) Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC) N;R50/53.
CUMENE HYDROPEROXIDE	<1%
CAS-No.: 80-15-9	EC No.: 201-254-7

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Classification (EC 1272/2008) Org. Perox. E - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 3 - H331 Skin Corr. 1B - H314 STOT SE 3 - H335 STOT RE 2 - H373 Aquatic Chronic 2 - H411	Classification (67/548/EEC) O;R7 T;R23 C;R34 Xn;R21/22,R48/20/22 N;R51/53
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MALEIC ACID	<2%
CAS-No.: 110-16-7	EC No.: 203-742-5

Classification (EC 1272/2008) Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 STOT SE 3 - H335	Classification (67/548/EEC) Xn;R22 Xi;R36/37/38
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METHACRYLIC ACID	6-8%
CAS-No.: 79-41-4	EC No.: 201-204-4

Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1A - H314 STOT SE 3 - H335	Classification (67/548/EEC) C;R35 Xn;R21/22
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METHYL METHACRYLATE	55-60%
CAS-No.: 80-62-6	EC No.: 201-297-1

Classification (EC 1272/2008) Flam. Liq. 2 - H225 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 STOT SE 3 - H335	Classification (67/548/EEC) F;R11 R43 Xi;R37/38
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The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

Urethane Acrylate Resin in reactive solvent

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

General first aid, rest, warmth and fresh air. Do not give victim anything to drink if they are unconscious. Get medical attention if any discomfort continues.

Inhalation

Place unconscious person on the side in the recovery position and ensure breathing can take place. If respiratory problems, artificial respiration/oxygen. Get medical attention.

Ingestion

DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Provide rest, warmth and fresh air. Get medical attention immediately!

Skin contact

Use appropriate hand lotion to prevent defatting and cracking of skin. Immediately remove contaminated clothing. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention promptly if symptoms occur after washing.

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Eye contact

Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Fire can be extinguished using: Water spray, fog or mist. Foam, carbon dioxide or dry powder. Dry chemicals, sand, dolomite etc. Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards

Fire causes formation of toxic gases.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Use pressurised air mask if product is involved in a fire. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective clothing as described in Section 8 of this safety data sheet. Use protective gloves, goggles and suitable protective clothing.

6.2. Environmental precautions

Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Keep combustibles away from spilled material. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb in vermiculite, dry sand or earth and place into containers. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Vapours are heavier than air and may spread near ground to sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container. Avoid contact with oxidising agents.

Storage Class

Flammable liquid storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
METHACRYLIC ACID	WEL	20 ppm	72 mg/m3	40 ppm	143 mg/m3	
METHYL METHACRYLATE	WEL	50 ppm	208 mg/m3	100 ppm	416 mg/m3	

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

METHYL METHACRYLATE (CAS: 80-62-6)

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area.

Respiratory equipment

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Wear mask supplied with: Gas cartridge suitable for organic substances.

Hand protection

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	White.
Odour	Strong. Acrylic.
Solubility	Insoluble in water
Flash point (°C)	11

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerisation

May polymerize.

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10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials To Avoid

Alkali metals. Strong oxidising substances. Strong acids. Strong alkalis. Organic peroxides/hydroperoxides. Inorganic peroxides.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION11.1. Information on toxicological effects

Toxicological information

No information available.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

Vapours may irritate throat and respiratory system and cause coughing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Ingestion

Causes burns. May cause chemical burns in mouth and throat. May cause stomach pain or vomiting.

Skin contact

Causes burns. Risk of sensitisation or allergic reactions among sensitive individuals. May cause allergic reaction.

Eye contact

Causes burns. Extreme irritation of eyes and mucous membranes, including burning and tearing.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available.

12.4. Mobility in soil

Mobility:

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

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13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Absorb in vermiculite or dry sand and dispose of at a licenced hazardous waste collection point.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

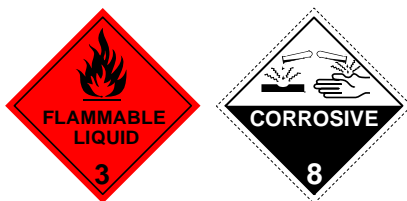
UN No. (ADR/RID/ADN)	1133
UN No. (IMDG)	1133
UN No. (ICAO)	1133

14.2. UN proper shipping name

Proper Shipping Name	ADHESIVES
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14.3. Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	

14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant
No.

14.6. Special precautions for user

EMS	F-E, S-D
Emergency Action Code	•3YE
Hazard No. (ADR)	33
Tunnel Restriction Code	(D/E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

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EU Legislation

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

Revision Date	16/04/2014
Revision	6
Risk Phrases In Full	
R34	Causes burns.
R35	Causes severe burns.
R22	Harmful if swallowed.
R21/22	Harmful in contact with skin and if swallowed.
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R48/20/22	Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
R11	Highly flammable
R36/37/38	Irritating to eyes, respiratory system and skin.
R37/38	Irritating to respiratory system and skin.
R37	Irritating to respiratory system.
R7	May cause fire.
R43	May cause sensitisation by skin contact.
R23	Toxic by inhalation.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard Statements In Full	
H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H412	Harmful to aquatic life with long lasting effects.
H242	Heating may cause a fire.
H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H373	May cause damage to organs <<Organs>> through prolonged or repeated exposure.
H335	May cause respiratory irritation.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H410	Very toxic to aquatic life with long lasting effects.
H400	Very toxic to aquatic life.

Disclaimer

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.