

DPW3294 HARDENER

Supplementary Precautionary Statements

P272	Contaminated work clothing should not be allowed out of the workplace.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P302+352	IF ON SKIN: Wash with plenty of soap and water.
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.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337	If eye irritation persists:
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

2.3. Other hazards

None if used properly

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHACRYLIC ACID	1-5%
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
METHYL METHACRYLATE	10-30%
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

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

Inhalation

Move to fresh air in case of accidental inhalation of vapours If required, provide artificial respiration Get medical attention.

Ingestion

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention Never give anything by mouth to an unconscious person

Skin contact

Wash the skin immediately with soap and water. Continue to rinse for at least 15 minutes and seek medical attention. Remove contaminated clothing. Wash contaminated clothing before re-use

Eye contact

immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists

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

General information

No further relevant information available

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

See section: Description of first aid measures

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Carbon dioxide, Dry chemical, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Oxides of: Carbon. Nitrogen.

Unusual Fire & Explosion Hazards

Closed containers may rupture or explode when exposed to extreme heat Keep containers cool irritating or toxic gases or fumes may be generated by thermal decomposition or combustion

5.3. Advice for firefighters

Special Fire Fighting Procedures

Water spray should be used to cool containers.

Protective equipment for fire-fighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Take up with an inert absorbent Store in a closed waste container until disposal

6.4. Reference to other sections

See section 7 for information on safe handling. See advice in section 8

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame.

7.2. Conditions for safe storage, including any incompatibilities

Do not store at temperatures about 38 C Keep away from heat, sparks and open flame. Ensure good ventilation/extraction

7.3. Specific end use(s)

2 Part adhesive

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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.

8.2. Exposure controls

Respiratory equipment

An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits

Hand protection

Use protective gloves made of: Nitrile. or Neoprene.

Eye protection

Wear approved safety goggles.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Skin protection

Neoprene or nitrile gloves recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	White / off-white.
Odour	Methacrylate
Solubility	Not determined
Initial boiling point and boiling range	~ 100 C
Melting point (°C)	Not determined.
Vapour density (air=1)	> 1
Vapour pressure	Not determined.
Evaporation rate	> 1 (butyl acetate = 1)
pH-Value, Conc. Solution	4.5-5.0 (5% solution or slurry in water)
Viscosity	No information available.
Decomposition temperature (°C)	No information available.
Odour Threshold, Lower	No information available.
Odour Threshold, Upper	No information available.
Flash point	No information available.
Auto Ignition Temperature (°C)	Not determined.
Flammability Limit - Lower(%)	2.1
Flammability Limit - Upper(%)	12.5
Partition Coefficient (N-Octanol/Water)	Not determined.
Explosive properties	Not determined.
Oxidising properties	Not determined.

9.2. Other information

No data available / Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions**Hazardous Polymerisation**

Will not polymerise.

10.4. Conditions to avoid

Avoid heat. Inert gas blanketing Freezing

10.5. Incompatible materials**Materials To Avoid**

Strong oxidisers free radical initiators inert gases Strong bases Acids Strong reducing agents. Azo-compounds

10.6. Hazardous decomposition products

Oxides of: Carbon. Nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

See section 3

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

No information available.

12.1. Toxicity

No Information available

12.2. Persistence and degradability

No further relevant information available

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not determined.

12.4. Mobility in soil

Mobility:

No further relevant information available

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Dispose of in accordance with local and national regulations

13.1. Waste treatment methods

Disposal must be made according to official regulations

Waste Class

D001 as per 40CFR 261.21

SECTION 14: TRANSPORT INFORMATION

General No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 1133

UN No. (IMDG) 1133

14.2. UN proper shipping name

Proper Shipping Name Adhesives containing a flammable liquid

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

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ADR/RID/ADN Class Class 3: Flammable liquids.

IMDG Class 3

14.4. Packing group

ADR/RID/ADN Packing group II

IMDG Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

No information available.

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

No information required.

SECTION 15: REGULATORY INFORMATION

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

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. 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 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Risk Phrases In Full

R35	Causes severe burns.
R21/22	Harmful in contact with skin 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.
R43	May cause sensitisation by skin contact.

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.
H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

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P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHYL METHACRYLATE		30-60%
CAS-No.: 80-62-6	EC No.: 201-297-1	
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 2 - H225	F;R11	
Skin Irrit. 2 - H315	R43	
Skin Sens. 1 - H317	Xi;R37/38	
STOT SE 3 - H335		

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

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

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

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

7.2. Conditions for safe storage, including any incompatibilities

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
METHYL METHACRYLATE	WEL	50 ppm	208 mg/m3	100 ppm	416 mg/m3	

WEL = Workplace Exposure Limit.

8.2. Exposure controls

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

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****15.2. Chemical Safety Assessment****SECTION 16: OTHER INFORMATION****Risk Phrases In Full**

R11	Highly flammable
R37/38	Irritating to respiratory system and skin.
R43	May cause sensitisation by skin contact.

Hazard Statements In Full

H315	Causes skin irritation.
H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.

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Supplementary Precautionary Statements

P272	Contaminated work clothing should not be allowed out of the workplace.
P261	Avoid breathing vapour/spray.
P264	Wash contaminated skin thoroughly after handling.
P321	Specific treatment (see medical advice on this label).
P302+352	IF ON SKIN: Wash with plenty of soap and water.
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.
P332+313	If skin irritation occurs: Get medical advice/attention.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337	If eye irritation persists:
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

2.3. Other hazards

None if used properly

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

METHACRYLIC ACID		1-5%
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	
METHYL METHACRYLATE		10-30%
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	

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

Inhalation

Move to fresh air in case of accidental inhalation of vapours If required, provide artificial respiration Get medical attention.

Ingestion

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention Never give anything by mouth to an unconscious person

Skin contact

Wash the skin immediately with soap and water. Continue to rinse for at least 15 minutes and seek medical attention. Remove contaminated clothing. Wash contaminated clothing before re-use

Eye contact

immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists

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

General information

No further relevant information available

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

See section: Description of first aid measures

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Carbon dioxide, Dry chemical, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Oxides of: Carbon. Nitrogen.

Unusual Fire & Explosion Hazards

Closed containers may rupture or explode when exposed to extreme heat Keep containers cool irritating or toxic gases or fumes may be generated by thermal decomposition or combustion

5.3. Advice for firefighters

Special Fire Fighting Procedures

Water spray should be used to cool containers.

Protective equipment for fire-fighters

Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Take up with an inert absorbent Store in a closed waste container until disposal

6.4. Reference to other sections

See section 7 for information on safe handling. See advice in section 8

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Keep away from heat, sparks and open flame.

7.2. Conditions for safe storage, including any incompatibilities

Do not store at temperatures about 38 C Keep away from heat, sparks and open flame. Ensure good ventilation/extraction

7.3. Specific end use(s)

2 Part adhesive

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

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.

8.2. Exposure controls

Respiratory equipment

An approved organic vapor respirator should be worn when exposures are expected to exceed the applicable limits

Hand protection

Use protective gloves made of: Nitrile. or Neoprene.

Eye protection

Wear approved safety goggles.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet.

Skin protection

Neoprene or nitrile gloves recommended.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste
Colour	White / off-white.
Odour	Methacrylate
Solubility	Not determined
Initial boiling point and boiling range	~ 100 C
Melting point (°C)	Not determined.
Vapour density (air=1)	> 1
Vapour pressure	Not determined.
Evaporation rate	> 1 (butyl acetate = 1)
pH-Value, Conc. Solution	4.5-5.0 (5% solution or slurry in water)
Viscosity	No information available.
Decomposition temperature (°C)	No information available.
Odour Threshold, Lower	No information available.
Odour Threshold, Upper	No information available.
Flash point	No information available.
Auto Ignition Temperature (°C)	Not determined.
Flammability Limit - Lower(%)	2.1
Flammability Limit - Upper(%)	12.5
Partition Coefficient (N-Octanol/Water)	Not determined.
Explosive properties	Not determined.
Oxidising properties	Not determined.

9.2. Other information

No data available / Not applicable

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Stable at normal conditions

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions**Hazardous Polymerisation**

Will not polymerise.

10.4. Conditions to avoid

Avoid heat. Inert gas blanketing Freezing

10.5. Incompatible materials**Materials To Avoid**

Strong oxidisers free radical initiators inert gases Strong bases Acids Strong reducing agents. Azo-compounds

10.6. Hazardous decomposition products

Oxides of: Carbon. Nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Toxicological information**

See section 3

SECTION 12: ECOLOGICAL INFORMATION**Ecotoxicity**

No information available.

12.1. Toxicity

No Information available

12.2. Persistence and degradability

No further relevant information available

12.3. Bioaccumulative potential**Bioaccumulative potential**

No data available on bioaccumulation.

Partition coefficient

Not determined.

12.4. Mobility in soil**Mobility:**

No further relevant information available

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

Dispose of in accordance with local and national regulations

13.1. Waste treatment methods

Disposal must be made according to official regulations

Waste Class

D001 as per 40CFR 261.21

SECTION 14: TRANSPORT INFORMATION**General**

No other information noted.

14.1. UN number

UN No. (ADR/RID/ADN) 1133

UN No. (IMDG) 1133

14.2. UN proper shipping name

Proper Shipping Name Adhesives containing a flammable liquid

14.3. Transport hazard class(es)

ADR/RID/ADN Class 3

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ADR/RID/ADN Class Class 3: Flammable liquids.

IMDG Class 3

14.4. Packing group

ADR/RID/ADN Packing group II

IMDG Packing group II

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

No information available.

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

No information required.

SECTION 15: REGULATORY INFORMATION

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

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. 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 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Risk Phrases In Full

R35	Causes severe burns.
R21/22	Harmful in contact with skin 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.
R43	May cause sensitisation by skin contact.

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.
H225	Highly flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.