



SAFETY DATA SHEET

Revision Date 24-Feb-2020

Version 9

1. IDENTIFICATION

Product identifier

Product Name 84115 5 MINUTE PLASTIC WELD (ADHESIVE)

Other means of identification

Product Code R478ADH2

Recommended use of the chemical and restrictions on use

Recommended Use Adhesive

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex
6875 Parkland Blvd.
Solon, Ohio 44139 USA
Telephone: 1-87-Permatex
(866) 732-9502

24-hour emergency phone number

Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

May Also Be Distributed by:

ITW Permatex Canada
101-2360 Bristol Circle
Oakville, ON Canada L6H 6M5
Telephone: (800) 924-6994

E-mail address: mail@permatex.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1B
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Emergency Overview

Signal word

Danger

Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause cancer
May cause respiratory irritation

May cause drowsiness or dizziness
May cause damage to organs through prolonged or repeated exposure



Appearance Off-white

Physical state Viscous liquid

Odor Methyl methacrylate

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves
Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Immediately call a POISON CENTER or doctor/physician
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Harmful to aquatic life with long lasting effects.

Unknown acute toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
METHYL METHACRYLATE	80-62-6	30 - 60

BUTYLATED HYDROXY TOLUENE	128-37-0	5 - 10
METHACRYLIC ACID	79-41-4	5 - 10
DIMETHYLBENZYL HYDROPEROXIDE	80-15-9	1 - 5
CUMENE	98-82-8	0.1 - 1

4. FIRST AID MEASURES

Description of first aid measures

General advice	Call 911 or emergency medical service. Remove and isolate contaminated clothing and shoes.
Eye contact	In case of contact with substance, immediately flush skin or eyes with running water for at least 20 minutes.
Skin contact	Wash skin with soap and water.
Inhalation	Move victim to fresh air. If breathing is irregular or stopped, administer artificial respiration. Administer oxygen if breathing is difficult.
Ingestion	IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians Keep victim warm and quiet.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO2, water spray or regular foam, Water spray, fog or regular foam, Use water spray or fog; do not use straight streams

Unsuitable extinguishing media

CAUTION: All these products have a very low flash point. Use of water spray when fighting fire may be inefficient

Specific hazards arising from the chemical

Vapors may travel to source of ignition and flash back. Vapors may form explosive mixtures with air. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Those substances designated with a "P" may polymerize explosively when heated or involved in a fire. Runoff to sewer may create fire or explosion hazard. Substance may be transported hot.

Explosion data

Sensitivity to Mechanical Impact None.
Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Stop leak if you can do it without risk.

Other Information Water spray may reduce vapor; but may not prevent ignition in closed spaces.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment A vapor suppressing foam may be used to reduce vapors. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Methods for cleaning up Use clean non-sparking tools to collect absorbed material. Dike far ahead of liquid spill for later disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required. Take precautionary measures against static discharges. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Store locked up.

Incompatible materials Strong oxidizing agents, Reducing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL METHACRYLATE 80-62-6	STEL: 100 ppm TWA: 50 ppm	TWA: 100 ppm TWA: 410 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 410 mg/m ³	IDLH: 1000 ppm TWA: 100 ppm TWA: 410 mg/m ³
BUTYLATED HYDROXY TOLUENE 128-37-0	TWA: 2 mg/m ³ inhalable fraction and vapor	(vacated) TWA: 10 mg/m ³	TWA: 10 mg/m ³
METHACRYLIC ACID 79-41-4	TWA: 20 ppm	(vacated) TWA: 20 ppm (vacated) TWA: 70 mg/m ³ (vacated) S*	TWA: 20 ppm TWA: 70 mg/m ³
CUMENE 98-82-8	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ (vacated) TWA: 50 ppm (vacated) TWA: 245 mg/m ³ (vacated) S* S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³

NIOSH IDLH *Immediately Dangerous to Life or Health*

Other Information Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).
Skin and body protection Wear protective natural rubber, nitrile rubber, Neoprene™ or PVC gloves.
Respiratory protection Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Viscous liquid
Appearance Off-white
Odor Methyl methacrylate
Odor threshold 0.75 ppm

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	101 °C / 214 °F	
Flash point	12 °C / 54 °F	
Evaporation rate	> 1	Butyl acetate = 1
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	12.5%	
Lower flammability limit:	1.6%	
Vapor pressure	28 mmHg @ 68°F	
Vapor density	>3	Air = 1
Relative density	0.95	
Water solubility	Slightly soluble	
Solubility(ies)	No information available	
Partition coefficient	No information available	
Autoignition temperature	421°C (789.8°F)	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point No information available
Molecular weight No information available
VOC Content (%) 76
Density No information available
Bulk density No information available
SADT (self-accelerating decomposition temperature) No information available

10. STABILITY AND REACTIVITY

Reactivity

No information available

Chemical stability

Stable under normal conditions

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents, Reducing agents

Hazardous Decomposition Products

Carbon oxides
Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

- Inhalation** May cause irritation of respiratory tract.
- Eye contact** Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
- Skin contact** May cause skin irritation and/or dermatitis. May cause sensitization by skin contact.
- Ingestion** Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
METHYL METHACRYLATE 80-62-6	= 7872 mg/kg (Rat) 8420 - 10000 mg/kg (Rat)	5000 - 7500 mg/kg (Rabbit) > 5 g/kg (Rabbit)	= 7093 ppm (Rat) 4 h
BUTYLATED HYDROXY TOLUENE 128-37-0	> 2930 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
METHACRYLIC ACID 79-41-4	= 1060 mg/kg (Rat)	= 500 mg/kg (Rabbit) 500 - 1000 mg/kg (Rabbit)	= 7.1 mg/L (Rat) 4 h
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	= 382 mg/kg (Rat)	= 0.126 mL/kg (Rabbit)	= 220 ppm (Rat) 4 h
CUMENE 98-82-8	= 1400 mg/kg (Rat)	= 12300 µL/kg (Rabbit)	> 3577 ppm (Rat) 6 h = 39000 mg/m ³ (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
METHYL METHACRYLATE 80-62-6	-	Group 3	-	-
BUTYLATED HYDROXY TOLUENE 128-37-0	-	Group 3	-	-

CUMENE 98-82-8	-	Group 2B	Reasonably Anticipated	X
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IARC (International Agency for Research on Cancer)
Not classifiable as a human carcinogen
Group 2B - Possibly Carcinogenic to Humans
 NTP (National Toxicology Program)
Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen
 OSHA (Occupational Safety and Health Administration of the US Department of Labor)
 X - Present

Target Organ Effects Eyes, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 5353 mg/kg
ATEmix (dermal) 6234 mg/kg
ATEmix (inhalation-dust/mist) 18.7 mg/l
ATEmix (inhalation-vapor) 10272.6 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
METHYL METHACRYLATE 80-62-6	0.7
BUTYLATED HYDROXY TOLUENE 128-37-0	4.17
METHACRYLIC ACID 79-41-4	0.93
CUMENE 98-82-8	3.7

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

US EPA Waste Number D001, U055 U096 U162

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
METHYL METHACRYLATE	Toxic

80-62-6	Ignitable
DIMETHYLBENZYL HYDROPEROXIDE	Toxic
80-15-9	Ignitable
CUMENE	Toxic
98-82-8	Ignitable

14. TRANSPORT INFORMATION

DOT

UN/ID No 1133
 Ethanol Adhesives, Limited Quantity (LQ)
 Hazard Class 3
 Packing Group II
 Emergency Response Guide Number 128

IATA

UN/ID No ID 8000
 Ethanol Consumer commodity
 Hazard Class 9
 ERG Code 9L

IMDG

UN/ID No 1133
 Ethanol Adhesives, Limited Quantity (LQ)
 Hazard Class 3
 Packing Group II
 EmS-No F-E, S-D

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies
 EINECS/ELINCS Complies
 ENCS Not determined
 IECSC Complies
 KECL Complies
 PICCS Complies
 AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
METHYL METHACRYLATE - 80-62-6	1.0
DIMETHYLBENZYL HYDROPEROXIDE - 80-15-9	1.0

CUMENE - 98-82-8	0.1
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SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
METHYL METHACRYLATE 80-62-6	1000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
METHYL METHACRYLATE 80-62-6	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	10 lb	-	RQ 10 lb final RQ RQ 4.54 kg final RQ
CUMENE 98-82-8	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
CUMENE 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
METHYL METHACRYLATE 80-62-6	X	X	X
BUTYLATED HYDROXY TOLUENE 128-37-0	X	X	X
METHACRYLIC ACID 79-41-4	X	X	X
DIMETHYLBENZYL HYDROPEROXIDE 80-15-9	X	X	X
CUMENE 98-82-8	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

WHMIS Hazard Class

B2 - Flammable liquid, D2B - Toxic materials

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 2	Flammability 3	Instability 0	-
HMIS	Health hazards 2	Flammability 3	Physical hazards 0	Personal protection B

NFPA (National Fire Protection Association)
HMIS (Hazardous Material Information System)

Revision Date 24-Feb-2020

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End of Safety Data Sheet