SAFETY DATA SHEET

1. Identification

Product identifier Permatex Black Plastic Welder Activator

Other means of identification

Synonyms 84126

Recommended useAdhesive activator **Recommended restrictions**None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ITW Permatex Canada

Address c/o ITW Global Brands Canada

2360 Bristol Circle, Suite 101 Oakville, ON L6H 6M5

Telephone (905) 693-8900

E-mail literature.canada@permatex.com

Emergency phone number 800-255-3924 (Chem-Tel)

Supplier See above.

2. Hazard identification

Physical hazardsFlammable liquidsCategory 2Health hazardsSkin corrosion/irritationCategory 2Sensitization, skinCategory 1

Specific target organ toxicity following single

Category 1

Category 1

Category 3 respiratory tract irritation

exposure

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapour.

Causes skin irritation.

May cause an allergic skin reaction. May cause respiratory irritation.

Precautionary statement

Prevention Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed. Ground and bond container and receiving equipment. Use

explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action

to prevent static discharges. Avoid breathing vapours.

Use only outdoors or in a well-ventilated area.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace.

Wear protective gloves.

Response In case of fire: Use dry sand, dry chemical, or alcohol resistant foam to extinguish.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it

before reuse. Specific treatment (see product label).

IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTRE if you feel unwell.

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

Keep cool. Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

Other hazards

Supplemental information

None known.

Exempt - Consumer product

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, or any consumer product as defined in section 2 of the Canada Consumer Product Safety Act.

3. Composition/information on ingredients

Chemical name	Common name and synonyms	CAS number	%
Carbon black		1333-86-4	0.1 - 1 *
Methyl methacrylate		80-62-6	65 - 85 *
Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl- ropyl-	2-p	34562-31-7	1 - 5 *

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTRE or doctor if you feel unwell.

Skin contact IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin

irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before

reuse.

Eye contact Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical

attention if irritation persists.

Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to Ingestion

reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing.

Get medical attention if symptoms occur.

Most important

symptoms/effects, acute and

delayed

Skin irritation. May cause redness and pain.

May cause an allergic skin reaction. Dermatitis. Rash.

May cause respiratory irritation.

Indication of immediate medical attention and special

treatment needed

Treat patient symptomatically.

General information IF exposed or concerned: Get medical attention. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse. Avoid contact with eyes and skin. Keep out

of reach of children.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Water fog. Foam. Dry chemical powder. Carbon dioxide.

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical

to a source of ignition and flash back.

Hazardous combustion

products

May include and are not limited to: Oxides of carbon.

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

During fire, gases hazardous to health may be formed. Vapours may travel considerable distance

Special protective equipment and precautions for firefighters Fire fighting

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

equipment/instructions Specific methods

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

General fire hazards Highly flammable liquid and vapour.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Do not breathe mist or vapour. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

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Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. When handling, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store locked up.

8. Exposure controls/Personal protection

Occupational exposure limits

US. ACGIH	Threshold	Limit Values
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Components	Туре	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Туре	Value	
Carbon black (CAS 1333-86-4)	TWA	3.5 mg/m3	
Methyl methacrylate (CAS 80-62-6)	STEL	410 mg/m3	
,		100 ppm	
	TWA	205 mg/m3	
		50 ppm	

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form	
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable	
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm		
	TWA	50 ppm		

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Туре	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	

50 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

TWA

Components	Туре	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	

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Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety) Components Value Type Carbon black (CAS **TWA** 3.5 mg/m3 1333-86-4) Methyl methacrylate (CAS **TWA** 205 mg/m3 80-62-6) 50 ppm Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21) Components Value Type Carbon black (CAS 15 minute 7 mg/m3 1333-86-4) 8 hour 3.5 mg/m3 Methyl methacrylate (CAS 15 minute 100 ppm 80-62-6) 8 hour 50 ppm No biological exposure limits noted for the ingredient(s). **Biological limit values** Appropriate engineering Ensure adequate ventilation. controls Individual protection measures, such as personal protective equipment Eye/face protection Wear safety glasses with side shields. Skin protection Natural or butyl rubber, nitrile or neoprene gloves. Confirm with a reputable supplier first. Hand protection Other As required by employer code. Respiratory protection Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2). Thermal hazards Not applicable. General hygiene Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. considerations 9. Physical and chemical properties **Appearance** Viscous Physical state Liquid. **Form** Liquid. Colour Black Solvent Odour **Odour threshold** 0.75 ppm pН Not available. Melting point/freezing point Not available. Initial boiling point and boiling 101 °C (213.8 °F) range Flash point 12.0 °C (53.6 °F) **Evaporation rate** > 1 BuAc = 1Flammability (solid, gas) Not applicable. Upper/lower flammability or explosive limits Flammability limit - lower 12.5 % (%) Flammability limit - upper 1.6 % (%) Explosive limit - lower (%) Not available. Not available. Explosive limit - upper (%)

28 mm Hg @ 20°C

> 3 Air = 1 0.95

Vapour pressure Vapour density

Relative density

Solubility(ies)

Solubility (water) Not available. Not available. Partition coefficient

(n-octanol/water)

Auto-ignition temperature 421 °C (789.8 °F) **Decomposition temperature** Not available. **Viscosity** Not available.

Other information

Not explosive. **Explosive properties** Not oxidising **Oxidising properties**

10. Stability and reactivity

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not mix

with other chemicals. Strong oxidising agents.

Incompatible materials

Hazardous decomposition

products

May include and are not limited to: Oxides of carbon.

11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation to the respiratory system.

Skin contact Causes skin irritation. May cause an allergic skin reaction. Eye contact Direct contact with eyes may cause temporary irritation. Ingestion May cause stomach distress, nausea or vomiting.

Symptoms related to the

Skin irritation. May cause redness and pain.

physical, chemical and

May cause an allergic skin reaction. Dermatitis. Rash.

May cause respiratory irritation. toxicological characteristics

Information on toxicological effects

Acute toxicity Componente

Components	Species	Test Results
Carbon black (CAS 1333-8	6-4)	
Acute		
Dermal		_
LD50	Rabbit	> 3000 mg/kg
Inhalation		
LC50	Not available	
Oral	5.	45400 #
LD50	Rat	> 15400 mg/kg
		> 10000 mg/kg, ECHA
		> 8000 mg/kg, ECHA/HSDB
Methyl methacrylate (CAS 8	80-62-6)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
Inhalation		
LC100	Guinea pig	17330 ppm, ECHA
	Mouse	16000 ppm, 4 Hours, ECHA
		14860 ppm, 3 Hours, ECHA
		61.8 mg/L, 3 Hours, ECHA
	Rat	16000 ppm, 4 Hours, ECHA
LC50	Mouse	9600 ppm, 1 Hours, ECHA

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Test Results Components **Species** 55 mg/L, 3 Hours, ECHA 18.5 mg/L, 2 Hours, HSDB Rat 13500 ppm, 3 Hours, ECHA 11250 - 12500 ppm, 2 Hours, ECHA 29.8 mg/L, 4 Hours, ECHA Oral LD50 5900 mg/kg, ECHA Guinea pig Mouse 5200 mg/kg, ECHA 5.5 ml/kg, HSDB Rabbit 6550 mg/kg, ECHA Rat 7900 mg/kg, ECHA Pyridine, 3,5-diethyl-1,2-dihydro-1-phenyl-2-propyl- (CAS 34562-31-7) Acute Dermal LD50 Rabbit: Rat > 1000 mg/kg, 24 h Inhalation LC50 Not available Oral LD50 Rat > 500 mg/kg Skin corrosion/irritation Causes skin irritation. Not available. **Exposure minutes** Not available. Erythema value Not available. Oedema value Not available. Serious eye damage/eye irritation Not available. Corneal opacity value Not available. Iris lesion value Conjunctival reddening Not available. value Not available. Conjunctival oedema value Recover days Not available. Respiratory or skin sensitisation **ACGIH** sensitisation Methyl methacrylate (CAS 80-62-6) Dermal sensitisation Canada - Manitoba OELs Hazard: Dermal sensitization Methyl methacrylate (CAS 80-62-6) Dermal sensitisation Canada - Quebec OELs: Sensitizer Methyl methacrylate (CAS 80-62-6) Sensitiser. Canada - Saskatchewan OELs Hazard Data: Sensitiser Methyl methacrylate (CAS 80-62-6) Sensitiser. Not a respiratory sensitizer. Respiratory sensitisation Skin sensitisation May cause an allergic skin reaction. No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity mutagenic or genotoxic. Carcinogenicity Carbon black is not unbound and in a respirable form within this product. Therefore it is not considered carcinogenic as it is biologically unavailable for the intended product use. This product is not expected to cause reproductive or developmental effects. Reproductive toxicity May cause respiratory irritation. Specific target organ toxicity single exposure Specific target organ toxicity -Not classified. repeated exposure **Aspiration hazard** Not an aspiration hazard. **Chronic effects** May cause damage to organs through prolonged or repeated exposure.

Not available.

Further information

12. Ecological information

See below **Ecotoxicity**

Ecotoxicological data

Components **Species Test Results**

Methyl methacrylate (CAS 80-62-6)

FC50 Crustacea Daphnia 69 mg/L, 48 Hours

Aquatic

LC50 Fish Fathead minnow (Pimephales promelas) 136.3 - 183.4 mg/L, 96 hours

Persistence and degradability

No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Mobility in soil No data available. Not available. Mobility in general

No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation Other adverse effects

potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of **Disposal instructions**

contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues / unused

products

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).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. Transport information

Canada: TDG Proof of Classification: Classification Method: Classified as per Part 2, Sections General

2.1 – 2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical

name and the classification of the product will appear below.

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN1133

Proper shipping name ADHESIVES containing flammable liquid

Technical name Methyl methacrylate

Hazard class Packing group Ш

TDG



15. Regulatory information

This product has been classified in accordance with the hazard criteria of the HPR and the SDS Canadian federal regulations contains all the information required by the HPR.

Exempt- consumer product

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

#32263 Page: 7 of 8 Issue date 16-July-2020 Canada DSL Challenge Substances: Listed substance

Carbon black (CAS 1333-86-4)

Listed

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS status Hazardous

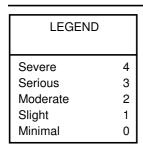
International regulations

Inventory status

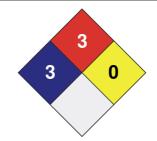
Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information







Issue date16-July-2020Revision date16-July-2020

Version No. 01

Other information For an updated SDS, please contact the supplier/manufacturer listed on the first page of the

document.

Disclaimer Information contained herein was obtained from sources considered technically accurate and

reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages

which may result from the use of or reliance on any information contained in this document.

Prepared by Dell Tech Laboratories Ltd. Phone: (519) 858-5021

SAFETY DATA SHEET

1. Identification

Product identifier Permatex Black Plastic Welder Adhesive

Other means of identification

Synonyms 84126

Recommended use Adhesive

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name ITW Permatex Canada

Address c/o ITW Global Brands Canada

2360 Bristol Circle, Suite 101 Oakville, ON L6H 6M5

Telephone (905) 693-8900

E-mail literature.canada@permatex.com

Emergency phone number 800-255-3924 (Chem-Tel)

Supplier See above.

2. Hazard identification

Physical hazardsFlammable liquidsCategory 2Health hazardsSkin corrosion/irritationCategory 2Serious eye damage/eye irritationCategory 1Sensitization, skinCategory 1

Carcinogenicity Category 2
Specific target organ toxicity following single Category 3 respiratory tract irritation

exposure

Specific target organ toxicity following

repeated exposure

Environmental hazards Not classified.

Label elements



Signal word Danger

Hazard statement Highly flammable liquid and vapour.

Causes skin irritation.
Causes serious eye damage.
May cause an allergic skin reaction.
Suspected of causing cancer.
May cause respiratory irritation.

May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use

Category 2

explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action

to prevent static discharges.

Do not breathe fume.

Use only outdoors or in a well-ventilated area.

Wash thoroughly after handling.

Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves, protective clothing, eye protection and face protection.

In case of fire: Use dry sand, dry chemical, or alcohol resistant foam to extinguish. Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. If skin irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it

before reuse. Specific treatment (see product 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.

IF INHALED: remove person to fresh air and keep comfortable for breathing. Get medical

attention if you feel unwell.

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

> Keep cool. Store locked up.

Disposal Dispose of container in accordance with local, regional, national and international regulations.

Other hazards

None known.

Supplemental information

Exempt - Consumer product

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, or any consumer product as defined in section 2 of the Canada Consumer Product Safety Act.

3. Composition/information on ingredients

Mixtures Chemical name Common name and synonyms **CAS** number % 5 - 10 * 2-Propenoic acid, 2-methyl-79-41-4 Cumene 98-82-8 0.1 - 1 * 1 - 5 * Hydroperoxide, 80-15-9 1-methyl-1-phenylethyl Methyl methacrylate 80-62-6 45 - 70 * 98-59-9 5 - 10 * Tosyl Chloride

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments

*CANADA GHS: The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation IF INHALED: remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTRE or doctor if you feel unwell.

Skin contact IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, If skin

irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before

reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present Eye contact

and easy to do. Continue rinsing. Immediately call a POISON CENTRE or doctor.

Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to Ingestion

reduce risk of aspiration. Never give anything by mouth if victim is unconscious or is convulsing.

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and

Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Skin irritation. May cause redness and pain.

blurred vision. Permanent eye damage including blindness could result.

May cause an allergic skin reaction. Dermatitis. Rash.

May cause respiratory irritation. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Treat patient symptomatically.

IF exposed or concerned: Get medical attention. Show this safety data sheet to the doctor in **General information** attendance. Wash contaminated clothing before reuse. Avoid contact with eyes and skin. Keep out

of reach of children.

5. Fire-fighting measures

Suitable extinguishing media Unsuitable extinguishing

Water fog. Foam. Dry chemical powder. Carbon dioxide.

media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. Vapours may travel considerable distance

to a source of ignition and flash back.

Hazardous combustion products

May include and are not limited to: Oxides of carbon.

#32262 Page: 2 of 9 Issue date 16-July-2020 Special protective equipment and precautions for firefighters

Fire fighting equipment/instructions

Specific methods
General fire hazards

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

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

Use standard firefighting procedures and consider the hazards of other involved materials. Highly flammable liquid and vapour.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Do not breathe mist or vapour. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. Prevent entry into waterways, sewer, basements or confined areas. For waste disposal, see section 13 of the SDS.

Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

7. Handling and storage

Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid contact with eyes, skin, and clothing. Wear appropriate personal protective equipment. Avoid prolonged exposure. Observe good industrial hygiene practices. Wash thoroughly after handling. When handling, do not eat, drink or smoke.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children. Store locked up.

8. Exposure controls/Personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Туре	Value
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	TWA	20 ppm
Cumene (CAS 98-82-8)	TWA	50 ppm
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm
	TWA	50 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Туре	Value
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	TWA	70 mg/m3
,		20 ppm
Cumene (CAS 98-82-8)	TWA	246 mg/m3
		50 ppm
Methyl methacrylate (CAS 80-62-6)	STEL	410 mg/m3
,		100 ppm
	TWA	205 mg/m3
		50 nnm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	[′] Туре	Value	
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	TWA	20 ppm	
Cumene (CAS 98-82-8)	STEL	75 ppm	

Components	Туре	Value	
	TWA	25 ppm	
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Canada. Manitoba OELs (Re Components	eg. 217/2006, The Workplace Safety <i>i</i> Type	And Health Act) Value	
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	TWA	20 ppm	
Cumene (CAS 98-82-8)	TWA	50 ppm	
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Canada. Ontario OELs. (Coi	ntrol of Exposure to Biological or Ch	emical Agents)	
Components	Туре	Value	
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	TWA	20 ppm	
Cumene (CAS 98-82-8)	TWA	50 ppm	
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm	
	TWA	50 ppm	
Canada. Quebec OELs. (Mir Components	nistry of Labor - Regulation respectir Type	ng occupational health and safety) Value	
2-Propenoic acid, 2-methyl-	TWA	70 mg/m3	
(CAS 79-41-4)	11111	20 ppm	
Cumene (CAS 98-82-8)	TWA	246 mg/m3	
		50 ppm	
Methyl methacrylate (CAS 80-62-6)	TWA	205 mg/m3	
		50 ppm	
Canada. Saskatchewan OEI Components	s (Occupational Health and Safety I Type	Regulations, 1996, Table 21) Value	
2-Propenoic acid, 2-methyl- (CAS 79-41-4)	15 minute	30 ppm	
	8 hour	20 ppm	
Cumene (CAS 98-82-8)	15 minute	74 ppm	
	8 hour	50 ppm	
Methyl methacrylate (CAS 80-62-6)	15 minute	100 ppm	
	8 hour	50 ppm	
ogical limit values	No biological exposure limits noted for	or the ingredient(s).	
ropriate engineering trols	Ensure adequate ventilation.		
vidual protection measures,	such as personal protective equipm	nent	
Eye/face protection	Wear safety glasses with side shield	s.	
Skin protection			
Hand protection	Natural or butyl rubber, nitrile or neo	orene gloves. Confirm with a reputable supplier first.	
Other	As required by employer code.		
Respiratory protection	Respirator should be selected by and professional following requirements	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Respirator should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134), CAN/CSA-Z94.4 and ANSI's standard for respiratory protection (Z88.2).	

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practices. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. Physical and chemical properties

Viscous **Appearance** Liquid. Physical state **Form** Liquid. Colour Off white

Odour Methacrylic acid.

Odour threshold 0.75 ppm Not available. Hq Not available. Melting point/freezing point Initial boiling point and boiling 101 °C (213.8 °F)

range

12.0 °C (53.6 °F) Flash point > 1 BuAc = 1**Evaporation rate** Not applicable. Flammability (solid, gas)

Upper/lower flammability or explosive limits

Flammability limit - lower

12.5 %

Flammability limit - upper

(%)

1.6 %

Explosive limit - lower (%) Not available. Explosive limit – upper Not available.

(%)

Vapour pressure 28 mm Hg @ 20°C

> 3 Air = 1Vapour density Not available. Relative density

Solubility(ies)

Solubility (water) Not available. Partition coefficient Not available.

(n-octanol/water)

421 °C (789.8 °F) **Auto-ignition temperature Decomposition temperature** Not available. Not available. **Viscosity**

Other information

Explosive properties Not explosive. **Oxidising properties** Not oxidising.

10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not mix

with other chemicals.

Incompatible materials Strong oxidising agents.

Hazardous decomposition

products

May include and are not limited to: Oxides of carbon.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Causes serious eye damage. Eye contact

Ingestion May cause stomach distress, nausea or vomiting.

#32262 Page: 5 of 9 Issue date 16-July-2020 Symptoms related to the physical, chemical and toxicological characteristics

Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and

blurred vision. Permanent eye damage including blindness could result.

Skin irritation. May cause redness and pain.

May cause an allergic skin reaction. Dermatitis. Rash.

May cause respiratory irritation.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
2-Propenoic acid, 2-methyl- (CA	S 79-41-4)	
Acute		
<i>Dermal</i> LD50	Rabbit	500 - 1000 mg/kg, ECHA
Inhalation	i idaan	ooo rooo mg/ng, _or //
LC50	Rat	7.1 mg/L, 4 Hours, ECHA/HSDB
Oral		
LD50	Mouse	1600 mg/kg, ECHA/HSDB
	Rat	2260 mg/kg, ECHA
		2224 mg/kg, ECHA/HSDB
		1320 mg/kg, ECHA
Cumene (CAS 98-82-8)		
Acute		
Dermal	D.11%	2422 // 2411 52114
LD50	Rabbit	> 3160 mg/kg, 24 Hours, ECHA
<i>Inhalation</i> LC50	Rat	22.1 mg/L, 1 hr, ECHA
Oral Oral	rial	ZZ. Filig/L, Fili, LOFIA
LD50	Rat	2260 mg/kg, ECHA
Hydroperoxide, 1-methyl-1-pher		3 3, -
Acute	, , (,	
Dermal		
LD50	Rat	1.1 - 1.4 ml/kg, HSDB
		500 mg/kg, HSDB
		1.1 ml/kg, HSDB
		0.5 ml/kg, HSDB
Inhalation		
LC50	Mouse	200 mg/L, 4 Hours, HSDB
Oral	D.:	000/l LIODD
LD50	Rat	382 mg/kg, HSDB
Methyl methacrylate (CAS 80-62 Acute	2-6)	
Dermal		
LD50	Rabbit	> 5000 mg/kg, 24 Hours, ECHA
Inhalation		
LC100	Guinea pig	17330 ppm, ECHA
	Mouse	16000 ppm, 4 Hours, ECHA
		14860 ppm, 3 Hours, ECHA
		61.8 mg/L, 3 Hours, ECHA
	Rat	16000 ppm, 4 Hours, ECHA
LC50	Mouse	9600 ppm, 1 Hours, ECHA
		55 mg/L, 3 Hours, ECHA
		18.5 mg/L, 2 Hours, HSDB
	Rat	13500 ppm, 3 Hours, ECHA
		11250 - 12500 ppm, 2 Hours, ECHA

Components **Species Test Results** 29.8 mg/L, 4 Hours, ECHA Oral LD50 Guinea pig 5900 mg/kg, ECHA Mouse 5200 mg/kg, ECHA 5.5 ml/kg, HSDB Rabbit 6550 mg/kg, ECHA Rat 7900 mg/kg, ECHA Tosyl Chloride (CAS 98-59-9) Acute Dermal LD50 Not available Inhalation LC50 Not available Oral

LD50 Rat 4680 mg/kg, ECHA

Causes skin irritation. Skin corrosion/irritation

Exposure minutes Not available. Erythema value Not available. Oedema value Not available.

Serious eye damage/eye

irritation

Causes serious eye damage.

Corneal opacity value Not available. Not available. Iris lesion value Conjunctival reddening Not available.

value

Conjunctival oedema value Not available. Recover days Not available.

Respiratory or skin sensitisation

ACGIH sensitisation

Methyl methacrylate (CAS 80-62-6) Dermal sensitisation

Canada - Alberta OELs: Irritant

2-Propenoic acid, 2-methyl- (CAS 79-41-4) Irritant

Canada - Manitoba OELs Hazard: Dermal sensitization

Methyl methacrylate (CAS 80-62-6) Dermal sensitisation

Canada - Quebec OELs: Sensitizer

Methyl methacrylate (CAS 80-62-6) Sensitiser.

Canada - Saskatchewan OELs Hazard Data: Sensitiser

Methyl methacrylate (CAS 80-62-6) Sensitiser.

Respiratory sensitisation Not a respiratory sensitizer.

Skin sensitisation May cause an allergic skin reaction.

No data available to indicate product or any components present at greater than 0.1% are Germ cell mutagenicity

mutagenic or genotoxic.

See below. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Cumene (CAS 98-82-8) Volume 101 - 2B Possibly carcinogenic to humans.

Methyl methacrylate (CAS 80-62-6) Volume 60 - 3 Not classifiable as to carcinogenicity to humans.

This product is not expected to cause reproductive or developmental effects. Reproductive toxicity

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 an aspiration hazard.

Chronic effects Prolonged exposure may cause chronic effects.

Further information Not available.

12. Ecological information				
Ecotoxicity	See below			
Ecotoxicological data				
Components		Species	Test Results	
Cumene (CAS 98-82-8)				
Algae	IC50	Algae	2.6 mg/L, 72 Hours	
Crustacea	EC50	Daphnia	0.6 mg/L, 48 Hours	
Aquatic				
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/L, 96 hours	
Methyl methacrylate (CAS 80-62	-6)			
Crustacea	EC50	Daphnia	69 mg/L, 48 Hours	
Aquatic				
Fish	LC50	Fathead minnow (Pimephales prom	elas) 136.3 - 183.4 mg/L, 96 hours	
Persistence and degradability	No data is a	No data is available on the degradability of any ingredients in the mixture.		
Bioaccumulative potential				
Mobility in soil	No data avai	No data available.		
Mobility in general	Not available	Not available.		
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.			
		13. Disposal considerations		
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.			
Local disposal regulations	Dispose in accordance with all applicable regulations.			
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.			
Waste from residues / unused	Dispose of in accordance with local regulations. Empty containers or liners may retain some			

14. Transport information

14. Hansport informatic

disposal.

Disposal instructions).

Canada: TDG Proof of Classification: Classification Method: Classified as per Part 2, Sections 2.1-2.8 of the Transportation of Dangerous Goods Regulations. If applicable, the technical name and the classification of the product will appear below.

product residues. This material and its container must be disposed of in a safe manner (see:

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

name and the diassincation of the produ

Transportation of Dangerous Goods (TDG - Canada)

Basic shipping requirements:

UN number UN1133

Proper shipping name ADHESIVES containing flammable liquid

Technical name Methyl methacrylate

Hazard class 3
Packing group ||

TDG

products

General

Contaminated packaging



15. Regulatory information

Canadian federal regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Exempt- consumer product

This product is not subject to the Hazardous Products Act (HPA) Part II (Hazardous Products) as per paragraph 12(j); Schedule 1 (Non-Application of Part II). This restriction states that Part II does not apply in respect of the sale or importation of anything listed in Schedule 1 which includes any pest control product as defined in subsection 2(1) of the Pest Control Products Act, any explosive as defined in section 2 of the Explosives Act, any cosmetic, device, drug or food, as defined in section 2 of the Food and Drugs Act, any consumer product as defined in section 2 of the Canada Consumer Product Safety Act and any wood or product made of wood.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

WHMIS status Hazardous

International regulations

Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)No

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH * 3

FLAMMABILITY 3

PHYSICAL HAZARD 0

PERSONAL X

PROTECTION X



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Version No. 01

Other information

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.

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Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

Prepared by

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Dell Tech Laboratories Ltd. Phone: (519) 858-5021