

SECTION 1: Identification**1.1. Identification**

Product form : Substance
Substance name : WELD-ON® 11 2-Component Low VOC Adhesive

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Adhesives, sealants
Restrictions on use : No additional information available

1.3. Supplier**Manufacturer**

IPS Corporation
17109 South Main Street
Gardena, CA 90248-3127 - USA
T 310-898-3300
www.ipscorp.com

Supplier

IPS Adhesives
600 Ellis Road
Durham, NC 27703 - USA
T 1-919-598-2400

1.4. Emergency telephone number

Emergency number : CHEMTEL 800-255-3924 / +1 813-248-0585 (International)

SECTION 2: Hazard(s) identification**2.1. Classification of the substance or mixture****GHS classification**

Flammable liquids, Category 2	H225 Highly flammable liquid and vapour.
Skin corrosion/irritation, Category 2	H315 Causes skin irritation.
Serious eye damage/eye irritation, Category 2	H319 Causes serious eye irritation.
Skin sensitisation, Category 1	H317 May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351 Suspected of causing cancer.
Reproductive toxicity, Category 1B	H360 May damage fertility or the unborn child.
Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation	H335 May cause respiratory irritation.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements**GHS-US labelling**

Hazard pictograms (GHS) :



Signal word (GHS) :

: Danger

Hazard statements (GHS) :

: H225 - Highly flammable liquid and vapour.
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H351 - Suspected of causing cancer.
H360 - May damage fertility or the unborn child.

Precautionary statements (GHS) :

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ventilating/lighting equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing must not be allowed out of the workplace.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P312 - Call a poison center/doctor if you feel unwell
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P363 - Wash contaminated clothing before reuse.
P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS_US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Name : WELD-ON® 11 2-Component Low VOC Adhesive

Name	Product identifier	%	GHS classification
Methyl methacrylate	(CAS-No.) 80-62-6	40 - 60	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
Titanium dioxide	(CAS-No.) 13463-67-7	5 - 10	Carc. 2, H351
Dibutyl phthalate	(CAS-No.) 84-74-2	3 - 7	Repr. 1B, H360 Aquatic Acute 1, H400
DIBENZOYL PEROXIDE	(CAS-No.) 94-36-0	1 - 2	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317
Methacrylic acid	(CAS-No.) 79-41-4	1 - 2	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1A, H314
Silane, dichlorodimethyl-, reaction products with silica	(CAS-No.) 68611-44-9	0 - 1	Acute Tox. 2 (Inhalation:dust,mist), H330
N,N-Dimethylaniline	(CAS-No.) 121-69-7	0.1 - 0.5	Flam. Liq. 4, H227 Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Carc. 2, H351 Aquatic Chronic 2, H411
1,2-epoxybutane	(CAS-No.) 106-88-7	0.1 - 0.5	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 STOT SE 3, H335 Aquatic Chronic 3, H412

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

Full text of hazard classes and H-statements : see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical

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- advice (show the label where possible).
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
- First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

- Symptoms/effects : Suspected of causing cancer. May damage fertility or the unborn child.
- Symptoms/effects after inhalation : May cause respiratory irritation. Irritation of the respiratory tract and the other mucous membranes. Headache. Nausea.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction. Repeated or prolonged skin contact may cause dermatitis and defatting.
- Symptoms/effects after eye contact : Causes serious eye irritation.
- Symptoms/effects after ingestion : Dizziness, headaches, nausea.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

- Suitable extinguishing media : Foam. Dry powder. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

- Fire hazard : Highly flammable liquid and vapour. Flammable vapours may accumulate in the container. Heavier than air, vapours may travel long distances along ground, ignite and flash back to source.
- Explosion hazard : May form flammable/explosive vapour-air mixture. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.
- Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special protective equipment and precautions for fire-fighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear a self contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Do not breathe aerosol. Do not breathe vapour. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Wear personal protective equipment.

6.1.1. For non-emergency personnel

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Refer to section 8.2.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage.

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6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour. No open flames. No smoking. Use only non-sparking tools. Do not breathe aerosol. Use only outdoors or in a well-ventilated area. Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Handle in accordance with good industrial hygiene and safety procedures. Use personal protective equipment as required.
Hygiene measures	: Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment.
Storage conditions	: Keep only in the original container. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Reducing agents. amines. Heavy metals. Peroxides. Free radical initiators. Oxidizing agent. Mineral acids.
Maximum storage period	: 18 months
Storage temperature	: 10 – 27 °C
Heat and ignition sources	: Keep away from heat, sparks and flame.
Storage area	: Store in dry, cool, well-ventilated area. Store in a dark area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Methyl methacrylate (80-62-6)		
ACGIH	Local name	Methyl methacrylate
ACGIH	ACGIH TWA (mg/m ³)	205 mg/m ³
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (mg/m ³)	410 mg/m ³
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT & eye irr; body weight eff; pulm edema. Notations: DSEN; A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2020
OSHA	OSHA PEL (TWA) (mg/m ³)	410 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
NIOSH	NIOSH REL (TWA) (mg/m ³)	410 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
Titanium dioxide (13463-67-7)		
ACGIH	Local name	Titanium dioxide
ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³
ACGIH	Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2020
OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)

Not applicable

N,N-Dimethylaniline (121-69-7)

ACGIH	Local name	Dimethylaniline
ACGIH	ACGIH TWA (mg/m ³)	25 mg/m ³
ACGIH	ACGIH TWA (ppm)	5 ppm
ACGIH	ACGIH STEL (mg/m ³)	50 mg/m ³
ACGIH	ACGIH STEL (ppm)	10 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: MeHb-emia. Notations: Skin; A4 (Not classifiable as a Human Carcinogen); BEIM
ACGIH	Regulatory reference	ACGIH 2020
OSHA	OSHA PEL (TWA) (mg/m ³)	25 mg/m ³
OSHA	OSHA PEL (TWA) (ppm)	5 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
NIOSH	NIOSH REL (TWA) (mg/m ³)	25 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm
NIOSH	NIOSH REL (STEL) (mg/m ³)	50 mg/m ³
NIOSH	NIOSH REL (STEL) (ppm)	10 ppm

Methacrylic acid (79-41-4)

ACGIH	Local name	Methacrylic acid
ACGIH	ACGIH TWA (mg/m ³)	70 mg/m ³
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Skin & eye irr
ACGIH	Regulatory reference	ACGIH 2020
NIOSH	NIOSH REL (TWA) (mg/m ³)	70 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	20 ppm

Dibutyl phthalate (84-74-2)

ACGIH	Local name	Dibutyl phthalate
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	Remark (ACGIH)	Testicular dam; eye & URT irr
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³

DIBENZOYL PEROXIDE (94-36-0)

ACGIH	Local name	Benzoyl peroxide
ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³
ACGIH	Remark (ACGIH)	TLV® Basis: URT & skin irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2020
OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³

1,2-epoxybutane (106-88-7)

Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls

: Avoid creating mist or spray. Avoid splashing. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure good ventilation of the work station. Provide local exhaust or general room ventilation.

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Environmental exposure controls : Prevent leakage or spillage.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Avoid all unnecessary exposure.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Butyl rubber gloves

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing. Rubber Apron

Respiratory protection:

Approved organic vapour respirator. If excessive exposure exists, use only approved air-purifying or supplied air respirator operated in a positive pressure mode

Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Viscous liquid.
Colour	: A: white B: clear
Odour	: Acrid
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: > 1
Flammability (solid, gas)	: Highly flammable liquid and vapour.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: A: 1.050 - 1.058; B: 1.093 - 1.101 @ 23 °C
Solubility	: No data available
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: A: 30,000 - 40,000 cP; B: 20,000 - 30,000 cP @ 23 °C
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

9.2. Other information

VOC content : ≤ 50 g/l

SECTION 10: Stability and reactivity

10.1. Reactivity

No dangerous reactions known under normal conditions of use.

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10.2. Chemical stability

Stable under normal conditions. Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

10.3. Possibility of hazardous reactions

Hazardous polymerization may occur if exposed to high temperature. Free radical initiators. Reducing agents. Heavy metals.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Open flame.

10.5. Incompatible materials

Reducing agents. amines. Heavy metals. Peroxides. Oxidizer. Free radical initiators. Mineral acids.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Methyl methacrylate (80-62-6)	
LD50 oral rat	7900 – 9400 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
ATE (oral)	7900 mg/kg bodyweight
ATE (dust,mist)	29.8 mg/l/4h

Titanium dioxide (13463-67-7)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	> 6.82 mg/l/4h

Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)	
LD50 oral rat	> 5000 mg/kg
LC50 inhalation rat (mg/l)	0.477 mg/l/4h
ATE (vapours)	0.477 mg/l/4h
ATE (dust,mist)	0.477 mg/l/4h

N,N-Dimethylaniline (121-69-7)	
ATE (oral)	100 mg/kg bodyweight
ATE (dermal)	300 mg/kg bodyweight
ATE (gases)	700 ppmv/4h
ATE (vapours)	3 mg/l/4h
ATE (dust,mist)	0.5 mg/l/4h

Methacrylic acid (79-41-4)	
LD50 oral rat	1320 mg/kg
LD50 dermal rabbit	500 – 1000 mg/kg
LC50 inhalation rat (mg/l)	7.1 mg/l/4h
ATE (oral)	1320 mg/kg bodyweight
ATE (dermal)	500 mg/kg bodyweight
ATE (vapours)	7.1 mg/l/4h
ATE (dust,mist)	7.1 mg/l/4h

Dibutyl phthalate (84-74-2)	
LD50 oral rat	6279 mg/kg
LC50 inhalation rat (mg/l)	≥ 15.68 mg/l/4h
ATE (oral)	6279 mg/kg bodyweight

DIBENZOYL PEROXIDE (94-36-0)	
LD50 oral rat	> 5000 mg/kg bodyweight

1,2-epoxybutane (106-88-7)	
LD50 oral rat	1100 µl/kg

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1,2-epoxybutane (106-88-7)

ATE (oral)	500 mg/kg bodyweight
ATE (dermal)	1100 mg/kg bodyweight
ATE (gases)	4500 ppmv/4h
ATE (vapours)	11 mg/l/4h
ATE (dust,mist)	1.5 mg/l/4h

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Suspected of causing cancer.

Methyl methacrylate (80-62-6)

IARC group	3 - Not classifiable
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Titanium dioxide (13463-67-7)

NOAEL (chronic, oral, animal/male, 2 years)	5 mg/kg bodyweight rat
Additional information	Carcinogen, cat 1A or 1B Inhalation of dust
IARC group	2B - Possibly carcinogenic to humans

N,N-Dimethylaniline (121-69-7)

IARC group	3 - Not classifiable
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DIBENZOYL PEROXIDE (94-36-0)

IARC group	3 - Not classifiable
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1,2-epoxybutane (106-88-7)

IARC group	2B - Possibly carcinogenic to humans
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Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: May cause respiratory irritation.

Methyl methacrylate (80-62-6)

STOT-single exposure	May cause respiratory irritation.
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1,2-epoxybutane (106-88-7)

STOT-single exposure	May cause respiratory irritation.
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STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Likely routes of exposure	: Skin and eye contact. Inhalation.
Symptoms/effects	: Suspected of causing cancer. May damage fertility or the unborn child.
Symptoms/effects after inhalation	: May cause respiratory irritation. Irritation of the respiratory tract and the other mucous membranes. Headache. Nausea.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction. Repeated or prolonged skin contact may cause dermatitis and defatting.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Dizziness, headaches, nausea.

SECTION 12: Ecological information

12.1. Toxicity

Methyl methacrylate (80-62-6)

LC50 fish 1	> 79 mg/l 96 h
EC50 crustacea	69 mg/l 48 h

Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)

LC50 fish 1	> 10000 mg/l 96 h Brachydanio rerio
EC50 crustacea	> 1000 mg/l 24 h

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N,N-Dimethylaniline (121-69-7)

LC50 fish 1	33 mg/l 48 h <i>Oryzias latipes</i>
LC50 fish 2	78.2 mg/l 96 h <i>Pimephales promelas</i>

Methacrylic acid (79-41-4)

LC50 fish 1	85 mg/l 96 h <i>Oncorhynchus mykiss</i>
LC50 fish 2	833 mg/l 96 h <i>Scophthalmus maximus</i>

Dibutyl phthalate (84-74-2)

LC50 fish 1	0.71 – 1.2 mg/l 96 h <i>Pimephales promelas</i>
LC50 other aquatic organisms 1	1.38 – 1.74 mg/l 96 h <i>Lepomis macrochiru</i>
EC50 crustacea	2.99 mg/l 48 h
LC50 fish 2	1.24 – 5.3 mg/l 96 h <i>Oncorhynchus mykiss</i>
LC50 other aquatic organisms 2	96 h
EC50 <i>Daphnia</i> 2	3.4 mg/l 48 h

1,2-epoxybutane (106-88-7)

LC50 fish 1	> 100 mg/l 96 h
EC50 crustacea	70 mg/l 48 h
ErC50 (algae)	> 500 mg/l 72 h

12.2. Persistence and degradability

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Persistence and degradability	Not established.
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Methyl methacrylate (80-62-6)

Persistence and degradability	Readily biodegradable.
BOD (% of ThOD)	94.3 % ThOD

N,N-Dimethylaniline (121-69-7)

Persistence and degradability	Readily biodegradable.
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Dibutyl phthalate (84-74-2)

Persistence and degradability	Readily biodegradable.
Biodegradation	79 – 85 %

1,2-epoxybutane (106-88-7)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

WELD-ON® 11 2-Component Low VOC Adhesive

Bioaccumulative potential	Not established.
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Methyl methacrylate (80-62-6)

Log Pow	1.38
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N,N-Dimethylaniline (121-69-7)

Log Pow	1.171 @ 35 °C
Bioaccumulative potential	Does not biaccumulate significantly.

Dibutyl phthalate (84-74-2)

Log Pow	4.46
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1,2-epoxybutane (106-88-7)

Log Pow	0.86
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12.4. Mobility in soil

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Ecology - soil	Not established.
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12.5. Other adverse effects

Other information : Avoid release to the environment.

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SECTION 13: Disposal considerations

13.1. Disposal methods

- Sewage disposal recommendations : Do not dispose of waste into sewer.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Additional information : Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

- Transport document description : UN1133 ADHESIVES, 3, II
UN-No.(DOT) : UN1133
Proper Shipping Name (DOT) : ADHESIVES
Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT) : II - Medium Danger
Hazard labels (DOT) : 3 - Flammable liquid



- DOT Packaging Non Bulk (49 CFR 173.xxx) : 173
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Special Provisions (49 CFR 172.102) : 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).
383 - Packages containing toy plastic or paper caps for toy pistols described as "UN0349, Articles, explosive, n.o.s. (Toy caps), 1.4S" or "NA0337, Toy caps, 1.4S" are not subject to the subpart E (labeling) requirements of this part when offered for transportation by motor vehicle, rail freight, cargo vessel, and cargo aircraft and, notwithstanding the packing method assigned in §173.62 of this subchapter, in conformance with the following conditions:
B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / (1 + a (tr - tf))$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.
TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).
DOT Packaging Exceptions (49 CFR 173.xxx) : 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 60 L
DOT Vessel Stowage Location : B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.
Emergency Response Guide (ERG) Number : 128
Other information : No supplementary information available.

Transport by sea

- Transport document description (IMDG) : UN 1133 ADHESIVES, 3, II
UN-No. (IMDG) : 1133

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Proper Shipping Name (IMDG)	: ADHESIVES
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 5 L

Air transport

Transport document description (IATA)	: UN 1133 ADHESIVES, 3, II
UN-No. (IATA)	: 1133
Proper Shipping Name (IATA)	: ADHESIVES
Class (IATA)	: 3 - Flammable Liquids
Packing group (IATA)	: II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Methyl methacrylate (80-62-6)

Subject to reporting requirements of United States SARA Section 313

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.
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CERCLA RQ	1000 lb
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N,N-Dimethylaniline (121-69-7)

EPA TSCA Regulatory Flag	TP - TP - indicates a substance that is the subject of a proposed TSCA section 4 test rule.
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CERCLA RQ	100 lb
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Dibutyl phthalate (84-74-2)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	10 lb
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DIBENZOYL PEROXIDE (94-36-0)

Subject to reporting requirements of United States SARA Section 313

1,2-epoxybutane (106-88-7)

Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	100 lb
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15.2. International regulations

CANADA

Methyl methacrylate (80-62-6)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)

Listed on the Canadian DSL (Domestic Substances List) inventory.

N,N-Dimethylaniline (121-69-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

Methacrylic acid (79-41-4)

Listed on the Canadian DSL (Domestic Substances List) inventory.

DIBENZOYL PEROXIDE (94-36-0)

Listed on the Canadian DSL (Domestic Substances List) inventory.

1,2-epoxybutane (106-88-7)

Listed on the Canadian DSL (Domestic Substances List) inventory.

EU-Regulations

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Methyl methacrylate (80-62-6)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Titanium dioxide (13463-67-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

DIBENZOYL PEROXIDE (94-36-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

1,2-epoxybutane (106-88-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

Methyl methacrylate (80-62-6)

Listed on the Chinese Catalog of Hazardous Chemicals.
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on KECI (Korean Existing Chemicals Inventory)

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the TCSI (Taiwan Chemical Substance Inventory)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Japanese ISHL (Industrial Safety and Health Law)

Silane, dichlorodimethyl-, reaction products with silica (68611-44-9)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

N,N-Dimethylaniline (121-69-7)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the Korea Designated Existing Substances List (First Batch).
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Chinese Catalog of Hazardous Chemicals.
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on Taiwan National Chemical Inventory
Listed on the AICS (Australian Inventory of Chemical Substances)

Methacrylic acid (79-41-4)

Listed on KECI (Korean Existing Chemicals Inventory)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on Taiwan National Chemical Inventory
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Chinese Catalog of Hazardous Chemicals.

DIBENZOYL PEROXIDE (94-36-0)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on NZIoC (New Zealand Inventory of Chemicals)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)

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DIBENZOYL PEROXIDE (94-36-0)

Listed on the Korea Designated Existing Substances List (First Batch).
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on the Chinese Catalog of Hazardous Chemicals.
China List of Hazardous Chemicals for Priority Management- SAWS
Not listed on Taiwan National Chemical Inventory.

1,2-epoxybutane (106-88-7)

Listed on IARC (International Agency for Research on Cancer)
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)
Listed on the Chinese Catalog of Hazardous Chemicals.
Listed on Taiwan National Chemical Inventory
Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory
Listed on KECI (Korean Existing Chemicals Inventory)
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)
Listed on the AICS (Australian Inventory of Chemical Substances)
Listed on NZIoC (New Zealand Inventory of Chemicals)

15.3. US State regulations

⚠ WARNING: This product can expose you to 1,3-butadiene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	Carcinogenicity	Developmental toxicity	Reproductive toxicity male	Reproductive toxicity female	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Ethyl acrylate(140-88-5)	X				not determined	
1,3-butadiene(106-99-0)	X	X	X	X	0.4 µg/day	
Titanium dioxide(13463-67-7)	X					
Dibutyl phthalate(84-74-2)		X	X	X		
acetaldehyde; ethanal(75-07-0)	X				90 µg/day (inhalation)	
vinyl chloride(75-01-4)	X				3 µg/day	

Component	State or local regulations
Methyl methacrylate(80-62-6)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S. - Pennsylvania - RTK (Right to Know) List
Titanium dioxide(13463-67-7)	U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
N,N-Dimethylaniline(121-69-7)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
Methacrylic acid(79-41-4)	U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S. - Pennsylvania - RTK (Right to Know) List
Dibutyl phthalate(84-74-2)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S. - Pennsylvania - RTK (Right to Know) List
DIBENZOYL PEROXIDE(94-36-0)	U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities; U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations;

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Component	State or local regulations
	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
1,2-epoxybutane(106-88-7)	U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations; U.S. - Maine - Air Pollutants - Hazardous Air Pollutants; U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Data sources : National Fire Protection Association. Fire Protection Guide to Hazardous Materials; 10th edition. ACGIH (American Conference of Government Industrial Hygienists). European Standards: Personal Protective Equipment; accessed at: http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/personal-protective-equipment/index_en.htm. OSHA 29CFR 1910.1200 Hazard Communication Standard. Chemical Inspection & Regulation Service; accessed at: http://www.cirs-reach.com/Inventory/Global_Chemical_Inventories.html. Krister Forsberg and S.Z. Mansdorf, "Quick Selection Guide to Chemical Protective Clothing", Fifth Edition. European Chemicals Agency (ECHA) Registered Substances list. Accessed at <http://echa.europa.eu/>. Manufacturer Information. European Chemicals Agency (ECHA) C&L Inventory database. Accessed at <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>. TSCA Chemical Substance Inventory. Accessed at <http://www.epa.gov/oppt/existingchemicals/pubs/tscainventory/howto.html>. 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.

Other information : None.

Full text of H-statements:

H225	Highly flammable liquid and vapour.
H227	Combustible liquid
H241	Heating may cause a fire or explosion.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and acronyms:

	ACGIH (American Conference of Government Industrial Hygienists)
	ATE: Acute Toxicity Estimate

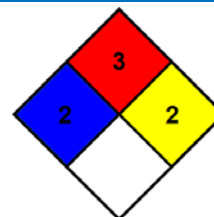
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	CAS (Chemical Abstracts Service) number
	CLP: Classification, Labelling, Packaging.
	GHS: Globally Harmonized System (of Classification and Labeling of Chemicals)
	LD50: Lethal Dose for 50% of the test population
LC50	Median lethal concentration
	TWA: Time Weighted Average
	STEL: Short Term Exposure Limits
	VOC

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 3 - Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature conditions.
- NFPA reactivity : 2 - Materials that readily undergo violent chemical change at elevated temperatures and pressures.



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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.