

**SECTION 1: Identification****1.1. Identification**

Product form : Mixture  
Product name : Weld-On 31 Off-White  
Other means of identification : Two Component 10:1 Ratio Cartridge – Off-White Adhesive

**1.2. Recommended use and restrictions on use**

Use of the substance/mixture : 2-Component Adhesive for bonding thermoplastics, metals and other composites

**1.3. Supplier****Manufacturer**

IPS Adhesives

600 Ellis Road, Durham, NC 27703 - USA

P.O. Box 12729, Research Triangle Park, NC 27709 - USA

Tel. 1-919-598-2400

**1.4. Emergency telephone number**

Emergency number : Transportation and Medical: CHEMTEL Tel. 800-255-3924; +1 813-248-0585 (International)

**SECTION 2: Hazard(s) identification****2.1. Classification of the substance or mixture****GHS US classification: Component "A" (Adhesive)**

Flam. Liq. 2 H225 Highly flammable liquid and vapor  
Skin Corr. 1A H314 Causes severe skin burns and eye damage  
Skin Sens. 1 H317 May cause an allergic skin reaction  
Carc. 2 H351 Suspected of causing cancer  
Repr. 2 H361 Suspected of damaging fertility or the unborn child  
STOT SE 3 H335 May cause respiratory irritation  
STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure

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

**GHS US classification: Component "B" (Activator)**

Flam. Liq. 4 H227 Combustible liquid  
Eye Irrit. 2 H319 Causes serious eye irritation  
Skin Sens. 1 H317 May cause an allergic skin reaction

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

**2.2. GHS Label elements, including precautionary statements****GHS US labeling: Component "A" (Adhesive)**

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor  
H314 - Causes severe skin burns and eye damage  
H317 - May cause an allergic skin reaction  
H335 - May cause respiratory irritation  
H351 - Suspected of causing cancer  
H361 - Suspected of damaging fertility or the unborn child  
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US) :

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

# Weld-On 31 Off-White

## Safety Data Sheet

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

P241 - Use explosion-proof electrical, lighting, ventilating equipment  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe mist, spray, vapors.  
P264 - Wash hands and forearms thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product  
P271 - Use only outdoors or in a well-ventilated area.  
P272 - Contaminated work clothing must not be allowed out of the workplace  
P280 - Wear eye protection, protective gloves.  
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower  
P363 - Wash contaminated clothing before reuse.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
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  
P314 - Get medical advice/attention if you feel unwell.  
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

### GHS US labeling: Component "B" (Activator)

Hazard pictograms (GHS US)

:



Signal word (GHS US)

: Warning

Hazard statements (GHS US)

: H227 - Combustible liquid  
H317 - May cause an allergic skin reaction  
H319 - Causes serious eye irritation

Precautionary statements (GHS US)

: P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing mist, spray, vapors.  
P264 - Wash hands and forearms thoroughly after handling.  
P272 - Contaminated work clothing must not be allowed out of the workplace  
P280 - Wear eye protection, protective gloves.  
P302+P352 - If on skin: Wash with plenty of soap and water  
P363 - Wash contaminated clothing before reuse.  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P337+P313 - If eye irritation persists: Get medical advice/attention.  
P370+P378 - In case of fire: Use media other than water to extinguish.  
P403+P235 - Store in a well-ventilated place. Keep cool.  
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

Not applicable

# Weld-On 31 Off-White

## Safety Data Sheet

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

### 3.2. Mixtures

#### Component "A" (Adhesive)

Name	Product identifier	%	GHS US classification
Methyl methacrylate	(CAS-No.) 80-62-6	55 - 65	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335
Methacrylic acid	(CAS-No.) 79-41-4	< 10	Acute Tox. 4 (Oral), H302 Acute Tox. 3 (Dermal), H311 Skin Corr. 1A, H314
Styrene	(CAS-No.) 100-42-5	< 4	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Carc. 2, H351 Repr. 2, H361 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 3, H412
Dimethyl-p-toluidine	(CAS-No.) 99-97-8	< 1	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Inhalation), H331 Carc. 2, H351 STOT RE 2, H373 Aquatic Chronic 3, H412

#### Component "B" (Activator)

DIBENZOYL PEROXIDE	(CAS-No.) 94-36-0	<= 15	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317
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Full text of hazard classes and H-statements : see section 16

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.
- First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. If symptoms persist call a doctor.
- First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
- First-aid measures after ingestion : Call a poison center/doctor/physician if you feel unwell.

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

- Symptoms/effects after skin contact : Causes severe burns.
- Symptoms/effects after eye contact : Causes serious eye damage.

### 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 : Water spray. Dry powder. Foam. Carbon dioxide.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

# Weld-On 31 Off-White

## Safety Data Sheet

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

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Do not get in eyes, on skin, or on clothing. No flames, no sparks. Eliminate all sources of ignition.

##### 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Ventilate area. Eliminate every possible source of ignition. Avoid release to the environment.

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material, e.g.: sand. Collect leaking and spilled liquid in sealable containers as far as possible.

Other information : Dispose of materials or solid residues at an authorized site.

#### 6.4. Reference to other sections

For further information refer to section 13. Section 8: personal protective equipment.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed : Flammable liquid and vapour.

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Remove all sources of ignition.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

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

### 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 <sup>3</sup> )	205 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	50 ppm
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (ppm)	100 ppm
ACGIH	Remark (ACGIH)	URT & eye irr; body weight eff; DSEN; RSEN; A4 (Not classifiable as a Human Carcinogen: Agents which cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity which are sufficient to classify the agent into one of the other categories)
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
Methacrylic acid (79-41-4)		
ACGIH	Local name	Methacrylic acid
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	70 mg/m <sup>3</sup>

# Weld-On 31 Off-White

## Safety Data Sheet

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

Methacrylic acid (79-41-4)		
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: Skin & eye irr
ACGIH	Regulatory reference	ACGIH 2018
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	70 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	20 ppm

Styrene (100-42-5)		
ACGIH	Local name	Styrene, monomer
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	85 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	20 ppm
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	170 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (ppm)	40 ppm
ACGIH	Remark (ACGIH)	CNS impair; URT irr; peripheral
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	420 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	100 ppm
OSHA	OSHA PEL (Ceiling) (ppm)	200 ppm
OSHA	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	600 ppm 5 mins. in any 3 hrs.
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	215 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	50 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	425 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	100 ppm

DIBENZOYL PEROXIDE (94-36-0)		
ACGIH	Local name	Benzoyl peroxide
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	TLV® Basis: URT & skin irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2018
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>

Dimethyl-p-toluidine (99-97-8)		
Not applicable		

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.  
Environmental exposure controls : Avoid release to the environment.

### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

butyl rubber gloves. Caution: Use 1 - 4 hours. >= 0.38mm

#### Eye protection:

In case of splashing or aerosol production: protective goggles.

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

# Weld-On 31 Off-White

## Safety Data Sheet

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

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Component "A" (Adhesive)		Component "B" (Activator)	
Physical state	: Liquid	Physical state	: Liquid
Appearance	: Viscous liquid.	Appearance	: Viscous liquid.
Color	: Off-white	Color	: white
Odor	: Solvent	Odor	: mild
Odor threshold	: 0.75 ppm MMA	Odor threshold	: No data available
pH	: No data available	pH	: No data available
Melting point	: No data available	Melting point	: No data available
Freezing point	: No data available	Freezing point	: No data available
Boiling point	: 100.5 °C	Boiling point	: No data available
Flash point	: 11.5 °C T.C.C. based on MMA	Flash point	: 84 °C BPO
Relative evaporation rate (butyl acetate=1)	: > 1	Relative evaporation rate (butyl acetate=1)	: < 1
Flammability (solid, gas)	: No data available	Flammability (solid, gas)	: No data available
Vapor pressure	: 28 mm Hg MMA	Vapor pressure	: No data available
Relative vapor density at 20 °C	: > 3	Relative vapor density at 20 °C	: No data available
Relative density	: 1.01	Relative density	: 1.211
Solubility	: In water, material is partially soluble.	Solubility	: insoluble in water.
Log Pow	: No data available	Log Pow	: No data available
Auto-ignition temperature	: 421 °C	Auto-ignition temperature	: No data available
Decomposition temperature	: No data available	Decomposition temperature	: 110 °C
Viscosity, kinematic	: No data available	Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available	Viscosity, dynamic	: No data available
Explosive limits	: LEL: 1.6 vol % MMA UEL: 12.5 MMA	Explosive limits	: No data available
Explosive properties	: No data available	Explosive properties	: No data available
Oxidizing properties	: No data available	Oxidizing properties	: No data available

#### 9.2. Other information

##### Component "A" (Adhesive)

VOC content: <= 50 g/l

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

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

#### 10.2. Chemical stability

Stable under normal conditions. Flammable liquid and vapour. Heating may cause a fire.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Keep away from heat and open flame.

#### 10.5. Incompatible materials

Reducing agents. Oxidizing agent. Metals.

# Weld-On 31 Off-White

## Safety Data Sheet

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

### 10.6. Hazardous decomposition products

None under normal use. Carbon oxides (CO, CO<sub>2</sub>). Nitrogen oxides.

## SECTION 11: Toxicological information

### Component "A" (Adhesive)

#### 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 US (oral)	7900 mg/kg body weight
ATE US (dust, mist)	29.8 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 US (oral)	1320 mg/kg body weight
ATE US (dermal)	500 mg/kg body weight
ATE US (vapors)	7.1 mg/l/4h
ATE US (dust, mist)	7.1 mg/l/4h

Styrene (100-42-5)	
LD50 oral rat	2650 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	11.8 mg/l/4h
LC50 inhalation rat (ppm)	2800 ppm/4h
ATE US (oral)	2650 mg/kg body weight
ATE US (gases)	2800 ppmV/4h
ATE US (vapors)	11.8 mg/l/4h
ATE US (dust, mist)	11.8 mg/l/4h

Dimethyl-p-toluidine (99-97-8)	
ATE US (oral)	100 mg/kg body weight
ATE US (dermal)	300 mg/kg body weight
ATE US (gases)	700 ppmV/4h
ATE US (vapors)	3 mg/l/4h
ATE US (dust, mist)	0.5 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
Serious eye damage/irritation : Eye damage, category 1, implicit  
Respiratory or skin sensitization : 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

Styrene (100-42-5)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	Reasonably anticipated to be Human Carcinogen

Dimethyl-p-toluidine (99-97-8)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Suspected of damaging fertility or the unborn child.  
Specific target organ toxicity – single exposure : May cause respiratory irritation.

# Weld-On 31 Off-White

## Safety Data Sheet

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

### Methyl methacrylate (80-62-6)

Specific target organ toxicity – single exposure : May cause respiratory irritation.

Specific target organ toxicity – repeated exposure : Causes damage to organs through prolonged or repeated exposure.

### Styrene (100-42-5)

Specific target organ toxicity – repeated exposure : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified  
Viscosity, kinematic : No data available  
Likely routes of exposure : Dermal.  
Symptoms/effects after skin contact : Causes severe burns.  
Symptoms/effects after eye contact : Causes serious eye damage.

### Component "B" (Activator)

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified  
Skin corrosion/irritation : Not classified  
Serious eye damage/irritation : Causes serious eye irritation.  
Respiratory or skin sensitization : May cause an allergic skin reaction.  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

### DIBENZOYL PEROXIDE (94-36-0)

IARC group : 3 - Not classifiable

Reproductive toxicity : Not classified  
Specific target organ toxicity – single exposure : Not classified  
Specific target organ toxicity – repeated exposure : Not classified  
Aspiration hazard : Not classified  
Viscosity, kinematic : No data available  
Likely routes of exposure : Dermal.  
Symptoms/effects after skin contact : May cause an allergic skin reaction.  
Symptoms/effects after eye contact : Causes serious eye irritation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### Methyl methacrylate (80-62-6)

LC50 fish 1 : > 79 mg/l 96 h

EC50 Daphnia 1 : 69 mg/l 48 h

### Methacrylic acid (79-41-4)

LC50 fish 1 : 85 mg/l 96 h *Oncorhynchus mykiss*

LC50 fish 2 : 833 mg/l 96 h *Scophthalmus maximus*

### Styrene (100-42-5)

LC50 fish 1 : 10 mg/l

EC50 Daphnia 1 : 4.7 mg/l

LC50 fish 2 : 4.02 mg/l



# Weld-On 31 Off-White

## Safety Data Sheet

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

### Styrene (100-42-5)

NOEC chronic crustacea	1.01 mg/l
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### 12.2. Persistence and degradability

#### Methyl methacrylate (80-62-6)

Persistence and degradability	Readily biodegradable.
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BOD (% of ThOD)	94.3 % ThOD
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#### Styrene (100-42-5)

Biodegradation	80 %
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### 12.3. Bioaccumulative potential

#### Methyl methacrylate (80-62-6)

Log Pow	1.38
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#### Styrene (100-42-5)

Bioconcentration factor (BCF REACH)	74
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### 12.4. Mobility in soil

No additional information available

### 12.5. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2920 Corrosive liquids, flammable, n.o.s. (Methacrylic acid, Methyl methacrylate monomer), 8 (3), I

UN-No.(DOT) : UN2920

Proper Shipping Name (DOT) : Corrosive liquids, flammable, n.o.s.  
Methacrylic acid, Methyl methacrylate monomer

Transport hazard class(es) (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : I - Great Danger

Subsidiary risk (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 8 - Corrosive  
3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 201

DOT Packaging Bulk (49 CFR 173.xxx) : 243

DOT Symbols : G - Identifies PSN requiring a technical name

# Weld-On 31 Off-White

## Safety Data Sheet

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

DOT Special Provisions (49 CFR 172.102)	: A6 - For combination packaging, if plastic inner packaging are used, they must be packed in tightly closed metal receptacles before packing in outer packaging. B10 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks, and DOT 57 portable tanks are not authorized. T14 - 6 mm Prohibited 178.275(g)(3). TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: $t_r$ is the maximum mean bulk temperature during transport, $t_f$ is the temperature in degrees celsius of the liquid during filling, and $a$ is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling ( $t_f$ ) and the maximum mean bulk temperature during transportation ( $t_r$ ) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: $d_{15}$ and $d_{50}$ are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively. TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	: None
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 0.5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 2.5 L
DOT Vessel Stowage Location	: C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	: 25 - Protected from sources of heat, 40 - Stow "clear of living quarters"
Emergency Response Guide (ERG) Number	: 132
Other information	: No supplementary information available.

### Transportation of Dangerous Goods

Transport document description	: 2920 Corrosive liquids, flammable, n.o.s. (Methacrylic acid, Methyl methacrylate monomer), 8 (3), I
UN-No. (TDG)	: 2920
Proper Shipping Name (Transportation of Dangerous Goods)	: Corrosive liquids, flammable, n.o.s. (Methacrylic acid, Methyl methacrylate monomer)
TDG Primary Hazard Classes	: 8 - Class 8 - Corrosives
Packing group	: I - Great Danger
TDG Subsidiary Classes	: 3

### Transport by sea

Transport document description (IMDG)	: UN 2920 CORROSIVE LIQUID, FLAMMABLE, N.O.S. (Methacrylic acid, Methyl methacrylate monomer), 8 (3), I
UN-No. (IMDG)	: 2920
Proper Shipping Name (IMDG)	: CORROSIVE LIQUID, FLAMMABLE, N.O.S.
Class (IMDG)	: 8 - Corrosive substances
Packing group (IMDG)	: I - substances presenting high danger
Subsidiary risks (IMDG)	: 3 - Flammable liquids

### Air transport

Transport document description (IATA)	: UN 2920 Corrosive liquid, flammable, n.o.s. (Methacrylic acid, Methyl methacrylate monomer), 8 (3), I
UN-No. (IATA)	: 2920
Proper Shipping Name (IATA)	: Corrosive liquid, flammable, n.o.s.
Class (IATA)	: 8 - Corrosives
Packing group (IATA)	: I - Great Danger
Subsidiary risks (IATA)	: 3 - Flammable liquids

# Weld-On 31 Off-White

## Safety Data Sheet

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

### 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

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Methyl methacrylate	CAS-No. 80-62-6	49.5 - 58.5%
Styrene	CAS-No. 100-42-5	< 3.6%
DIBENZOYL PEROXIDE	CAS-No. 94-36-0	<= 1.5%

#### Methyl methacrylate (80-62-6)

EPA TSCA Regulatory Flag	T - T - indicates a substance that is the subject of a final TSCA section 4 test rule.
CERCLA RQ	1000 lb

#### Styrene (100-42-5)

CERCLA RQ	1000 lb
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#### 15.2. International regulations

##### CANADA

#### Methyl methacrylate (80-62-6)

Listed on the Canadian DSL (Domestic Substances List)

#### Methacrylic acid (79-41-4)

Listed on the Canadian DSL (Domestic Substances List)

#### Styrene (100-42-5)

Listed on the Canadian DSL (Domestic Substances List)

#### Dimethyl-p-toluidine (99-97-8)

Listed on the Canadian DSL (Domestic Substances List)

#### DIBENZOYL PEROXIDE (94-36-0)

Listed on the Canadian DSL (Domestic Substances List)

##### EU-Regulations

#### Methyl methacrylate (80-62-6)

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

#### Styrene (100-42-5)

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)

#### Methacrylic acid (79-41-4)

Listed on KECI (Korean Existing Chemicals Inventory)

# Weld-On 31 Off-White

## Safety Data Sheet

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

### Styrene (100-42-5)

Listed on IARC (International Agency for Research on Cancer)  
Listed as carcinogen on NTP (National Toxicology Program)  
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 Taiwan National Chemical Inventory  
Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)  
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.  
Listed on Chinese List of Hazardous Chemicals for Priority Management-SAWS

### 15.3. US State regulations

**⚠ WARNING:** This product can expose you to Styrene and Dimethyl-p-toluidine, which are known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

Styrene (100-42-5)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

  

Dimethyl-p-toluidine (99-97-8)					
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
Yes	No	No	No		

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
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
Styrene(100-42-5)	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; 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

## SECTION 16: Other information

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

Full text of H-phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Chronic 3	Hazardous to the aquatic environment - Chronic Hazard Category 3

# Weld-On 31 Off-White

## Safety Data Sheet

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

Asp. Tox. 1	Aspiration hazard Category 1
Carc. 2	Carcinogenicity Category 2
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 2	Flammable liquids Category 2
Flam. Liq. 3	Flammable liquids Category 3
Org. Perox. B	Organic Peroxide Category B
Repr. 2	Reproductive toxicity Category 2
Skin Corr. 1A	Skin corrosion/irritation Category 1A
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H241	Heating may cause a fire or explosion
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H311	Toxic 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
H335	May cause respiratory irritation
H351	Suspected of causing cancer
H361	Suspected of damaging fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

SDS US (GHS HazCom 2012)

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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*