

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Issue date: 05/08/2020 Version: 1.0

#### **SECTION 1: Identification**

1.1. Identification

Use of the substance/mixture

Product form Product name : Mixture

WELD-ON® 10 (A) Low VOC 2-Component Adhesive

Supplier

**IPS** Adhesives

600 Ellis Road

T 1-919-598-2400

Durham, NC 27703 - USA

#### 1.2. Recommended use and restrictions on use

: 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

#### 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 2H225Highly flammable liquid and vapour.Skin corrosion/irritation, Category 2H315Causes skin irritation.Serious eye damage/eye irritation, Category 2AH319Causes serious eye irritation.Skin sensitisation, Category 1H317May cause an allergic skin reaction.Carcinogenicity, Category 2H315Suspected of causing cancer.Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritationH335May 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) Hazard statements (GHS)

Precautionary statements (GHS)



#### : Danger

- : 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.
- 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

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS classification
Methyl methacrylate	(CAS-No.) 80-62-6	45 - 65	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
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	0.3 - 0.7	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

\*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

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 advice (show the label where possible).
First-aid measures after inhalation	<ul> <li>Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.</li> </ul>
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 cautiously with water for several minutes. 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 effect	ets (acute and delayed)
Symptoms/effects	: Suspected of causing cancer.
Symptoms/effects after inhalation	: May cause respiratory irritation. Nausea. Headache.

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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	: Nausea. Vomiting. Mental confusion.
<b>4.3.</b> Immediate medical attention a Treat symptomatically.	nd special treatment, if necessary
SECTION 5: Fire-fighting measu	res
5.1. Suitable (and unsuitable) extin	guishing media
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
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. Thermal decomposition may produce : Carbon oxides (CO, CO2), Hydrogen chloride, smoke, Chlorine.
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 a	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, protecti	ve equipment and emergency procedures
General measures	: Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid contact with skin, eyes and clothing. Do not breathe aerosol. Do not breathe vapour. Use personal protective equipment as required.
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

Emergency procedures : Ventilate area.

## 6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3.	6.3. Methods and material for containment and cleaning up		
For cont	ainment	:	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods	s for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Use steel container.

: Refer to section 8.2.

## 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		
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 formatic of vapour. No open flames. No smoking. Use only non-sparking tools. Avoid contact with skir eyes and clothing. Use only outdoors or in a well-ventilated area. Do not breathe aerosol. Do not breathe vapours. Wear personal protective equipment.	n,
Hygiene measures	Do not eat, drink or smoke when using this product.	
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7.2. Conditions for safe storage, includ	ing any incompatibilities
Storage conditions	: Keep only in the original container. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. Strong acids. Strong oxidizers. amines. ammonia. Caustic products. Isocyanates.
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 methacrylat	e (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)	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 <sup>3</sup> )	410 mg/m <sup>3</sup>	
OSHA	OSHA PEL (TWA) (ppm)	100 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	410 mg/m <sup>3</sup>	
NIOSH	NIOSH REL (TWA) (ppm)	100 ppm	
Titanium dioxide (1	3463-67-7)		
ACGIH	Local name	Titanium dioxide	
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>	
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 <sup>3</sup> )	15 mg/m <sup>3</sup>	
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
Silane, dichlorodim	nethyl-, reaction products with silica (68611-44-9)		
Not applicable			
N,N-Dimethylanilin	· · · ·		
ACGIH	Local name	Dimethylaniline	
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>	
ACGIH	ACGIH TWA (ppm)	5 ppm	
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>	
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 <sup>3</sup> )	25 mg/m <sup>3</sup>	
OSHA	OSHA PEL (TWA) (ppm)	5 ppm	
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1	
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	25 mg/m <sup>3</sup>	
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N,N-Dimethylaniline (121-69-7)				
NIOSH	NIOSH REL (TWA) (ppm)	5 ppm		
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	50 mg/m <sup>3</sup>		
NIOSH	NIOSH REL (STEL) (ppm)	10 ppm		
Methacrylic acid (7	9-41-4)			
ACGIH	Local name	Methacrylic acid		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	70 mg/m <sup>3</sup>		
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 <sup>3</sup> )	70 mg/m <sup>3</sup>		
NIOSH	NIOSH REL (TWA) (ppm)	20 ppm		

#### 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.

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. If there is a risk of liquid being splashed : face shield

#### Skin and body protection:

Wear suitable protective clothing. Impervious clothing

#### **Respiratory protection:**

In case of inadequate ventilation wear respiratory protection. Approved organic vapour respirator. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material. In confined space use self-contained breathing apparatus

#### Other information:

Do not eat, drink or smoke during use.

9.1. Information on basic physical and chemical properties		
Physical state	: Liquid	
Appearance	: Viscous.	
Colour	: white	
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	

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Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: >3
Relative density	: 1.043 – 1.063 @ 23 °C
Density	: 8.771 lb/gal
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	: 30000 – 50000 cP
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
9.2. Other information	
VOC content	: ≤ 70 g/l

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous Polymerization may occur.

#### 10.4. Conditions to avoid

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

#### 10.5. Incompatible materials

Strong bases. Strong acids. Strong oxidizers. amines. ammonia. Caustic products. Isocyanates.

#### 10.6. Hazardous decomposition products

None under normal use.

#### SECTION 11: Toxicological information

11.1.	Information on toxicological effects		
Acute to:	kicity (oral)	:	Not classified
Acute to:	kicity (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	
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N,N-Dimethylaniline (121-69-7)	
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
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
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
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
Methyl methacrylate (80-62-6)	
STOT-single exposure	May cause respiratory irritation.
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects	: Suspected of causing cancer.
Symptoms/effects after inhalation	: May cause respiratory irritation. Nausea. Headache.
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 skin contact Symptoms/effects after eye contact	

## **SECTION 12: Ecological information**

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 Oryzias latipes
LC50 fish 2	78.2 mg/l 96 h Pimephales promelas
Methacrylic acid (79-41-4)	
Methacrylic acid (79-41-4)	
LC50 fish 1	85 mg/l 96 h Oncorhynchus mykiss

#### 12.2. Persistence and degradability

Methyl methacrylate (80-62-6)	
Readily biodegradable.	
94.3 % ThOD	
Readily biodegradable.	

#### 12.3. Bioaccumulative potential

Methyl methacrylate (80-62-6)	
Log Pow	1.38
N,N-Dimethylaniline (121-69-7)	
Log Pow	1.171 @ 35 °C
Bioaccumulative potential	Does not biaccumulate significantly.

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerati	ons
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	: Hazardous waste.

## **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

149 - When transported as a limited quantity or a consumer commodity, the maximum net

383 - Packages containing toy plastic or paper caps for toy pistols described as "UN0349,

capacity specified in 173.150(b)(2) of this subchapter for inner packagings may be increased to

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

DOT Special Provisions (49 CFR 172.102)



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:

5 L (1.3 gallons).

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	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
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5L
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
Proper Shipping Name (IMDG)	: ADHESIVES
Class (IMDG)	: 3 - Flammable liquids
Packing group (IMDG)	: II - substances presenting medium danger
Limited quantities (IMDG)	: 5L
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
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#### **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.	
CERCLA RQ	1000 lb	
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.	
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.

#### **EU-Regulations**

 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)

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

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.

#### 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)	Х	х	Х	Х	0.4 µg/day	
Titanium dioxide(13463-67-7)	Х					

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

### **SECTION 16: Other information**

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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.

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ull text of H-statements:	
H225	Highly flammable liquid and vapour.
H227	Combustible liquid
H301	Toxic if swallowed.
H302	Harmful if swallowed.
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.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H411	Toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

		ACGIH (American Conference of Government Industrial Hygienists)	
		ATE: Acute Toxicity Estimate	
		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	Volatile Organic Compounds	
NFPA health hazard		: 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.	
NFF	A 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.	

SDS Prepared by: The Redstone Group, dba SafeBridge Consultants, Inc. 110 Polaris Pkwy Suite 200 Westerville, OH USA 43082 P: +1 (614) 923-7472 www.redstonegrp.com

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.



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#### **SECTION 1: Identification**

#### Identification 1.1.

Product form Product name : Mixture

WELD-ON® 10 (B) Low VOC 2-Component Adhesive

Supplier

**IPS** Adhesives

600 Ellis Road

T 1-919-598-2400

Durham, NC 27703 - USA

#### 1.2. Recommended use and restrictions on use

- Use of the substance/mixture Restrictions on use
- : Adhesives, sealants : 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

#### 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 Serious eye damage/eye irritation, Category 2 Skin sensitisation, Category 1 Carcinogenicity, Category 2 Specific target organ toxicity - Single exposure, Category 3, Narcosis Full text of H statements : see section 16

- H225 Highly flammable liquid and vapour.
- H319 Causes serious eye irritation.
- H317 May cause an allergic skin reaction.
- H351 Suspected of causing cancer.
- H336 May cause drowsiness or dizziness.

#### 2.2. GHS Label elements, including precautionary statements

## **GHS-US** labelling

Hazard pictograms (GHS)

Signal word (GHS) Hazard statements (GHS)

Precautionary statements (GHS)

- : Danger
- : H225 Highly flammable liquid and vapour.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H336 May cause drowsiness or dizziness.
  - H351 Suspected of causing cancer.
- : 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.
- 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

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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). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. 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)

18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

#### Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS classification
2-Butanone	(CAS-No.) 78-93-3	45 - 65	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
DIBENZOYL PEROXIDE	(CAS-No.) 94-36-0	5 - 15	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317
Silane, dichlorodimethyl-, reaction products with silica	(CAS-No.) 68611-44-9	0 - 2	Acute Tox. 2 (Inhalation:dust,mist), H330
1,2-epoxybutane	(CAS-No.) 106-88-7	1 - 2	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

#### **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 advice (show the label where possible). : Remove person to fresh air and keep comfortable for breathing. Call a POISON First-aid measures after inhalation CENTER/doctor if you feel unwell. : Wash skin thoroughly with mild soap and water. Take off contaminated clothing and wash it First-aid measures after skin contact before reuse. If skin irritation or rash occurs: Get medical advice/attention. First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. : Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell. First-aid measures after ingestion Most important symptoms and effects (acute and delayed) 4.2. Symptoms/effects : Suspected of causing cancer. Symptoms/effects after inhalation : May cause drowsiness or dizziness. Nausea. Headache. Symptoms/effects after skin contact : May cause an allergic skin reaction. Repeated or prolonged skin contact may cause dermatitis and defatting.

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Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Nausea. Vomiting. Mental confusion.
<b>4.3. Immediate medical attention</b> a Treat symptomatically.	and special treatment, if necessary
SECTION 5: Fire-fighting meas	ures
5.1. Suitable (and unsuitable) exti	inguishing media
Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
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. Thermal decomposition may produce : Carbon oxides (CO, CO2), Hydrogen chloride, smoke, Chlorine.
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, protec	tive equipment and emergency procedures
General measures	<ul> <li>Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking. Avoid contact with skin, eyes and clothing. Do not breathe aerosol. Do not breathe vapour. Use personal protective equipment as required.</li> </ul>
	vapour. Ose personal protective equipment as required.
6.1.1. For non-emergency personne	
0 71	
Protective equipment	el
Protective equipment Emergency procedures	el : Refer to section 8.2.
Protective equipment Emergency procedures 6.1.2. For emergency responders	el : Refer to section 8.2. : Evacuate unnecessary personnel.
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment	<ul> <li>el</li> <li>: Refer to section 8.2.</li> <li>: Evacuate unnecessary personnel.</li> <li>: Refer to section 8.2.</li> </ul>
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures	el : Refer to section 8.2. : Evacuate unnecessary personnel.
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> </ul>
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> </ul>
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters 6.3. Methods and material for con	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> </ul>
<ul> <li>Protective equipment</li> <li>Emergency procedures</li> <li>6.1.2. For emergency responders</li> <li>Protective equipment</li> <li>Emergency procedures</li> <li>6.2. Environmental precautions</li> <li>Prevent entry to sewers and public waters</li> <li>6.3. Methods and material for com</li> <li>For containment</li> </ul>	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> </ul> s. tainment and cleaning up <ul> <li>Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.</li> </ul>
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters 6.3. Methods and material for com	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> </ul> s. tainment and cleaning up <ul> <li>Contain any spills with dikes or absorbents to prevent migration and entry into sewers or</li> </ul>
Protective equipment Emergency procedures 6.1.2. For emergency responders Protective equipment Emergency procedures 6.2. Environmental precautions Prevent entry to sewers and public waters 6.3. Methods and material for com For containment	<ul> <li>Refer to section 8.2.</li> <li>Evacuate unnecessary personnel.</li> <li>Refer to section 8.2.</li> <li>Ventilate area.</li> <li>ventilate area.</li> <li>s.</li> <li>trainment and cleaning up</li> <li>Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.</li> <li>Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect</li> </ul>

SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
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 form of vapour. No open flames. No smoking. Use only non-sparking tools. Avoid contact with eyes and clothing. Use only outdoors or in a well-ventilated area. Do not breathe aerosol. not breathe vapours. Wear personal protective equipment.	ation skin,
Hygiene measures	: Do not eat, drink or smoke when using this product.	
7.2. Conditions for safe storage, including	g 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	
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	equipment.
Storage conditions	: Keep only in the original container. Keep in fireproof place. Keep container tightly closed.
Incompatible products	: Strong bases. Strong acids. Strong oxidizers. amines. ammonia. Caustic products. Isocyanates.
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

2-Butanone (78-93-3	)	
ACGIH	Local name	Methyl ethyl ketone (MEK)
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	590 mg/m <sup>3</sup>
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	885 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (ppm)	300 ppm
ACGIH	Remark (ACGIH)	URT irr; CNS & PNS impair
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	590 mg/m <sup>3</sup>
OSHA	OSHA PEL (TWA) (ppm)	200 ppm
NIOSH	NIOSH REL (TWA) (mg/m <sup>3</sup> )	590 mg/m <sup>3</sup>
NIOSH	NIOSH REL (TWA) (ppm)	200 ppm
NIOSH	NIOSH REL (STEL) (mg/m <sup>3</sup> )	885 mg/m <sup>3</sup>
NIOSH	NIOSH REL (STEL) (ppm)	300 ppm
Silane, dichlorodime	ethyl-, reaction products with silica (68611-44-9)	
Not applicable		
DIBENZOYL PEROX	IDE (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 2020
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/m³
<b>1,2-epoxybutane (10</b> Not applicable	6-88-7)	· · ·

#### 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.

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

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#### Eye protection:

Chemical goggles. If there is a risk of liquid being splashed : face shield

#### Skin and body protection:

Wear suitable protective clothing. Impervious clothing

#### **Respiratory protection:**

In case of inadequate ventilation wear respiratory protection. Approved organic vapour respirator. Appropriate dust or mist respirator should be used if airborne particles are generated when handling this material. In confined space use self-contained breathing apparatus

#### Other information:

Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

Physical state: LiquidAppearance: Clear. Syrupy.Colour: ColourlessOdour: ketoneOdour threshold: No data availablepH: No data availableMelting point: No data availableFreezing point: No data availableBoiling point: No data availableFlash point: No data availableFlash point: No data availableRelative evaporation rate (butylacetate=1): < 1Flammability (solid, gas): No data availableVapour pressure: No data availableRelative density: 0.946 - 0.954 @ 23 °CDensity: 7.916 lb/galSolubility: No data availableLog Pow: No data availableAuto-ignition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data availableExplosive properties: No data available	9.1. Information on basic physical and chemical properties			
Colour: ColourlessOdour: ketoneOdour threshold: No data availablepH: No data availableMelting point: No data availableFreezing point: No data availableBoiling point: No data availableFlash point: No data availableRelative evaporation rate (butylacetate=1): < 1	Physical state	:	Liquid	
Odour:ketoneOdour threshold:No data availablepH:No data availableMelting point:No data availableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableFlash point:No data availableRelative evaporation rate (butylacetate=1):<1	Appearance	:	Clear. Syrupy.	
Odour threshold:No data availablepH:No data availableMelting point:No data availableFreezing point:No data availableBoiling point:No data availableFlash point:No data availableFlash point:No data availableRelative evaporation rate (butylacetate=1):<1	Colour	:	Colourless	
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Melting point:No data availableFreezing point:No data availableBoiling point:No data availableBoiling point:No data availableFlash point:No data availableRelative evaporation rate (butylacetate=1):< 1	Odour threshold	:	No data available	
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Flash point: No data availableRelative evaporation rate (butylacetate=1): < 1	Freezing point	:	No data available	
Relative evaporation rate (butylacetate=1): < 1Flammability (solid, gas): No data availableVapour pressure: No data availableRelative vapour density at 20 °C: No data availableRelative density: 0.946 - 0.954 @ 23 °CDensity: 7.916 lb/galSolubility: No data availableLog Pow: No data availableAuto-ignition temperature: No data availableDecomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Boiling point	:	No data available	
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Relative vapour density at 20 °C: No data availableRelative density: 0.946 - 0.954 @ 23 °CDensity: 7.916 lb/galSolubility: No data availableLog Pow: No data availableAuto-ignition temperature: No data availableDecomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Flammability (solid, gas)	:	No data available	
Relative density: 0.946 - 0.954 @ 23 °CDensity: 7.916 lb/galSolubility: No data availableLog Pow: No data availableAuto-ignition temperature: No data availableDecomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Vapour pressure	:	No data available	
Density: 7.916 lb/galSolubility: No data availableLog Pow: No data availableAuto-ignition temperature: No data availableDecomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Relative vapour density at 20 °C	:	No data available	
Solubility:No data availableLog Pow:No data availableAuto-ignition temperature:No data availableDecomposition temperature:No data availableViscosity, kinematic:No data availableViscosity, dynamic:No data availableExplosive limits:No data availableExplosive properties:No data available	Relative density	:	0.946 - 0.954 @ 23 °C	
Log Pow: No data availableAuto-ignition temperature: No data availableDecomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Density	:	7.916 lb/gal	
Auto-ignition temperature:No data availableDecomposition temperature:No data availableViscosity, kinematic:No data availableViscosity, dynamic:No data availableExplosive limits:No data availableExplosive properties:No data available	Solubility	:	No data available	
Decomposition temperature: No data availableViscosity, kinematic: No data availableViscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Log Pow	:	No data available	
Viscosity, kinematic:No data availableViscosity, dynamic:No data availableExplosive limits:No data availableExplosive properties:No data available	Auto-ignition temperature	:	No data available	
Viscosity, dynamic: No data availableExplosive limits: No data availableExplosive properties: No data available	Decomposition temperature	:	No data available	
Explosive limits: No data availableExplosive properties: No data available	Viscosity, kinematic	:	No data available	
Explosive properties : No data available	Viscosity, dynamic	:	No data available	
	Explosive limits	:	No data available	
Oxidising properties : No data available	Explosive properties	:	No data available	
	Oxidising properties	:	No data available	

#### 9.2. Other information

No additional information available

#### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

No dangerous reactions known under normal conditions of use.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Hazardous Polymerization may occur.

#### 10.4. Conditions to avoid

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

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### 10.5. Incompatible materials

Strong bases. Strong acids. Strong oxidizers. amines. ammonia. Caustic products. Isocyanates.

#### 10.6. Hazardous decomposition products

None under normal use.

SECTION 11: Toxicological information		
11.1. Information on toxicological effec		
Acute toxicity (oral)	: Not classified	
Acute toxicity (dermal)	: Not classified	
Acute toxicity (inhalation)	: Not classified	
, ,		
Unknown acute toxicity (GHS_US)	<ul> <li>18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral)</li> <li>18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal)</li> <li>18.56% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Dust/Mist))</li> </ul>	
2-Butanone (78-93-3)		
LD50 oral rat	3460 mg/kg	
LD50 dermal rabbit	> 2000 mg/kg	
ATE (oral)	3460 mg/kg bodyweight	
Silane, dichlorodimethyl-, reaction produc	cts 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	
DIBENZOYL PEROXIDE (94-36-0)		
LD50 oral rat	> 5000 ma/kg bodyweight	
1,2-epoxybutane (106-88-7)		
LD50 oral rat	1100 µl/kg	
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	: Not classified	
Serious eye damage/irritation	: Causes serious eye irritation.	
Respiratory or skin sensitisation	: May cause an allergic skin reaction.	
Germ cell mutagenicity	: Not classified	
0,00		
Carcinogenicity	: Suspected of causing cancer.	
DIBENZOYL PEROXIDE (94-36-0)		
IARC group	3 - Not classifiable	
1,2-epoxybutane (106-88-7)		
IARC group	2B - Possibly carcinogenic to humans	
Reproductive toxicity	: Not classified	
STOT-single exposure	: May cause drowsiness or dizziness.	
2-Butanone (78-93-3)		
STOT-single exposure	May cause drowsiness or dizziness.	
1,2-epoxybutane (106-88-7)		
STOT-single exposure	May cause respiratory irritation.	
STOT-repeated exposure	: Not classified	
Aspiration hazard	: Not classified	
Viscosity, kinematic	: No data available	
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Likely routes of exposure	: Inhalation. Skin and eye contact.
Symptoms/effects	: Suspected of causing cancer.
Symptoms/effects after inhalation	: May cause drowsiness or dizziness. Nausea. Headache.
Symptoms/effects after skin contact	: 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	: Nausea. Vomiting. Mental confusion.

### **SECTION 12: Ecological information**

#### 12.1. Toxicity

2-Butanone (78-93-3)	
LC50 fish 1	1587 mg/l
EC50 crustacea	308 mg/l
Silane, dichlorodimethyl-, react	n products with silica (68611-44-9)
LC50 fish 1	> 10000 mg/l 96 h Brachydanio rerio
EC50 crustacea	> 1000 mg/l 24 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

2-Butanone (78-93-3)		
Readily biodegradable.		
Readily biodegradable.		

#### 12.3. Bioaccumulative potential

1,2-epoxybutane (106-88-7)	
Log Pow	0.86

#### 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				
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	: Hazardous waste.			
SECTION 14: Transport informat Department of Transportation (DOT) In accordance with DOT	ion			

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

: 173

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Hazard labels (DOT)

: 3 - Flammable liquid



- DOT Packaging Non Bulk (49 CFR 173.xxx)
- DOT Packaging Bulk (49 CFR 173.xxx) DOT Special Provisions (49 CFR 172.102)

	<ul> <li>capacity specified in 173.150(b)(2) of this subchapter for inner packagings may be increased to 5 L (1.3 gallons).</li> <li>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:</li> <li>B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.</li> <li>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.</li> <li>T4 - 2.65 178.274(d)(2) Normal</li></ul>
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	
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
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
0.000 (	

: 149 - When transported as a limited quantity or a consumer commodity, the maximum net

#### 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

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# 2-Butanone (78-93-3) Not subject to reporting requirements of the United States SARA Section 313 Listed on EPA Hazardous Air Pollutant (HAPS) CERCLA RQ 5000 lb 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

#### 15.2. International regulations

#### CANADA

2-Butanone (78-93-3)
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.
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**

No additional information available

#### 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

#### 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

#### 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 NZIOS (New Zedation Wentory of Chemicals)

Listed on the AICS (Australian Inventory of Chemical Substances)

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 Taiwain 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)

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

Listed on the AICS (Australian Inventory of Chemical Substances) Listed on NZIoC (New Zealand Inventory of Chemicals)

#### 15.3. US State regulations

#### This product can expose you to acetaldehyde; ethanal, which is known to the State of California to cause cancer. 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)
acetaldehyde; ethanal(75-07-0)	Х				90 µg/day (inhalation)	
vinyl chloride(75-01-4)	Х				3 µg/day	

Component	State or local regulations
2-Butanone(78-93-3)	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 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
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**

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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.
H241	Heating may cause a fire or explosion.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
05/08/2020	EN (English)

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H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H412	Harmful to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

		ACGIH (American Conference of Government Industrial Hygienists)
		ATE: Acute Toxicity Estimate
		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	Volatile Organic Compounds
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.